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IDENTIFIERS *Iowa

ABSTRACT

The report describes the "IOWAscript" project (that extended from March 1971 through February 1974) to develop and disseminate occupational information as a tool for career decision making. Entry level occupations available in Iowa and not requiring a baccalaureate degree were researched with employers and public and private agencies. During the project first year, data on 205 occupations were developed, microfilmed on aperture cards, and distributed to eleven secondary schools for testing and evaluation. The next two years included elementary, postsecondary, and special groups users, in addition to secondary, with the total users at all locations estimated at 40,000. Inservice workshops and meetings for staff were held, a script written at sixth-grade reading level was microfilmed and distributed on aperture cards to accompany the occupational cards, and additional supportive materials were developed to help implement the project. Conclusions were that the occupational information is needed and will be used if available, that the microfilm method of presentation is very acceptable, and that a strong inservice component is needed. Most of the report consists of appended project materials. (MF)

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ED159320

FINAL REPORT

Title of Project: IOWAscript

Educational Agency: Des Moines Area
Community College
2006 Ankeny Blvd.
Ankeny, Iowa 50021

Project Director: Eldon Bergstrom

OE 015-872

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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IOWAscript PROJECT FINAL REPORT

Report Summary

The IOWAscript Project was funded March 1, 1971 to February 28, 1974.

The major objective of the project was developing, implementing, and disseminating occupational information as a tool for career decision making.

Occupational data was developed on 205 occupations, placed on microfilm and distributed to secondary school students. Supportive educational data was gathered and use methods developed. Eleven pilot schools tested the format of presentation, evaluated the data and rated the microfilm style of presentation. During the second and third year of the project 143 users included secondary, post-secondary and elementary students as well as special groups.

The results indicate both students and counselors feel the information is needed as a part of the total career education component in a school curriculum. The total major objective was met and materials developed exceeded the project proposal. As a result of this project it is evident that an occupational information system is needed for the entire state, that the microfilm method of presentation is accepted, that in-service activities are essential for utilization of this information and that local post-secondary educational data is lacking in secondary schools.

Counselors prefer information which is localized to the state and want data on post-secondary education opportunities which is reliable and current.

Agencies beyond the school setting have indicated a need for similar information and ways to provide this to meet special needs should be explored.

IOWAscript FINAL REPORT

Problem: Occupational information available to educators has not been relevant geographically, current to local employment demand, or presented in such a way as to expidite change within reasonable cost limits nor have educators made full use of occupational information in classrooms or counseling situations.

Project Design: The project was designed to develop occupational information from local sources, develop it in an attractive format, and disseminate the information on microfilm aperture cards.

Occupations to be researched were selected on the following criteria:

a. Occupations at the entry level

b. Occupations available in Iowa for beginning workers

c. Occupations not requiring a B.A. degree at entry level

d. A limited number of occupations which were of high interest level to students

Using employment data from employers, private agencies and Iowa State Employment Service, 200 occupational titles were selected for the original development. These covered an estimated 80% of the employment opportunities available as defined by the Iowa State Employment Service within the limits set by the above criteria. Later in the project five additional titles were added.

All occupations were researched locally by contacting a minimum of three employees (see Appendix H) or employers and a script was developed at a sixth-grade reading level (see Appendix A), photographed onto microfilm and distributed to the eleven pilot schools on aperture cards (see Appendix B).

Additional supportive materials were developed to provide information on training opportunities (Appendices C, D, & E). These were also distributed on aperture cards.

The eleven pilot schools were provided with Executive I Reader-Printers, print paper and supportive software for the occupational information system.

Three in-service workshops were held with counselors and instructional staff members from pilot schools on the DMACC campus and nine in-service meetings were conducted with selected staff members in the schools.

Six presentations to conferences, counselor-educator classes and teacher groups laid ground work for expansion of the project to other agencies and schools the second year of the project. An additional 59 agencies and schools used materials developed by the project staff during year II.

At the request of pilot schools the print paper for readers was discontinued and handout material was made available for students (see Appendix A) on request.

In-service for pilot schools was continued by a minimum of 4 visits by staff members to each school during the year and two workshops were conducted for personnel from all user schools.

Subscriber schools were visited a minimum of twice for in-service help and materials implementation planning. In-service materials were developed and two in-service meetings with school personnel from twenty-one of the subscriber schools were conducted.

Updating of materials for the second year of operation was accomplished by interviewing persons employed in the specific occupation, having them review the script for accuracy and suggesting changes. If discrepancy occurred in the information gained from employees, this was resolved through employers.

Supportive materials were developed to go along with the occupational materials (see Appendix F).

The third-project-year-materials development included, improvement of a key-sort system for aperture cards (see Appendix G), development of materials for elementary students (Appendix I), complete revision of existing scripts, addition of five new occupations, and adding education opportunity information from additional area schools. Additional supportive materials were developed to help implement the occupational information (Appendix F). During this year of the project a total of 143 agencies and schools used the materials. These were supported

by four area in-service meetings, 18 in-school, in-service meetings and two on-sight visits to each user.

Student populations served included K-12 in public schools, mentally disadvantaged in two locations, three social service agencies, ten college counseling centers, and eleven vocational rehabilitation centers. The number of users was estimated at 40,000 in all locations.

A total of 102 individuals visited the project on campus, displays and presentations were made at 37 conferences, conventions or college classes, and staff members spoke to two civic or non-education-connected groups.

The following conclusions can be drawn from this project:

1. Current occupational and educational information relevant to the geographical area is needed.
2. Materials will be used if available.
3. The microfilm method of presentation is well accepted by students and instructional personnel.
4. A strong in-service component must be developed as a companion to the factual data in an occupational information system.
5. Supportive materials are needed to implement occupational data.
6. The reader-printer concept is not practical from a cost standpoint but is an attractive feature for student use.

RECOMMENDATIONS

1. This service should be made available to all schools and agencies in Iowa at no or minimal cost.
2. Occupational selection should include occupations requiring a four-year college degree.
3. Further refinement should be made on the key sort system and additional materials developed for group use.
4. Vocational-Technical programs from all Area Community Colleges should be included and a key sort system developed for easier identification of specific training programs.

5. Materials should be developed for special groups such as mentally retarded, specific training areas and physically handicapped.

APPENDIX A

JOB TITLE ELECTRICIAN (Maintenance)

D.O.T.# 829.281

CLUSTER # 9

July, 1973

THE JOB

Are you thinking of becoming a maintenance electrician? A maintenance electrician, also called an electrical repairman, uses techniques to keep electrical systems working properly. When something goes wrong, the electrician makes the necessary repairs.

Do You Know:
- *What the job requirements are?
- *What training is needed and where you can get it?
- *What high school subjects can help you prepare for this job?
- *What the job opportunities are for an electrician?

If you do not know the answers to these and other important questions, take time to read this IOWAscript.

TO GET THE JOB

You Should Be Able To:
- *Use a variety of hand and power tools, and precision measuring instruments.
- *Work in high places without fear.
- *Analyze problems in electrical systems.

You Should Prefer To:
- *Work with your hands.
- *Accept responsibility.

You Should Be Physically Able To:
- *Lift and carry moderate to heavy weight objects.
- *Stretch and work in cramped, uncomfortable positions.
- *Use hands and fingers well.
- *See well and detect color differences.

You Should Know That:
- *You must complete a four year apprenticeship to become a journeyman electrician.
- *This is a rapidly developing field.
- *Maintenance electricians must continue learning new techniques throughout their careers.

des moines area community college
2006 ANKENY BLVD., ANKENY, IOWA 50021
PHONE 964-0651

an exemplary project in career education developed in cooperation with the iowa department of public instruction

EARNINGS

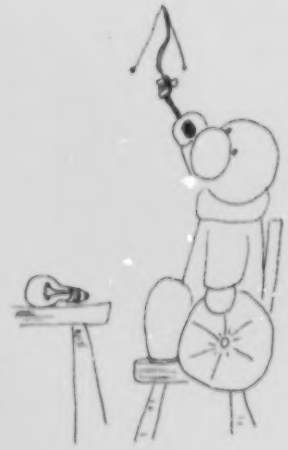
Number of Hours Per Week	Average Starting Salary	Salary Range
40 hrs.	$599 mo.	$525-$837 mo.

ON THE JOB

A maintenance electrician uses techniques to keep electrical systems working properly. The electrician makes the necessary repairs when something does go wrong. The electrician may also install new equipment and modify outdated equipment.

While making repairs, the electrician may perform preventive tasks such as checking wiring and other electrical parts. In this preventive maintenance part of the work, the electrician uses test equipment such as test lamps, ammeters, volt-ohm meters, and oscilloscopes.

In repair work, the maintenance electrician uses pliers, screwdrivers, wire cutters, drills, conduit bending tools, and various power tools. The electrician also uses diagrams and blueprints in much of this work. The electrician may make recommendations and design safety features for improperly made equipment.



THINGS TO THINK ABOUT

Advantages:
- *Maintenance electricians earn good pay.
- *There is security in having a skill.
- *Opportunities are good for qualified electricians.

Disadvantages:
- *Some shocks, minor cuts, and bruises are possible in this work.
- *Electricians must concentrate on exacting work.
- *Maintenance electricians must work indoors.

Advancements:
- *An electrician may go on to become plant maintenance or plant electrical superintendents.
- *With good training in electricity, an electrician may qualify for high paying jobs in related fields.

Benefits:
- *Health and accident insurance
- *Pension plans
- *Paid vacations and holidays
- *Sick leave

Related Occupations:
- *Electronics Technician
- *Radio & T.V. Repairman
- *Electrician (Construction)
- *Appliance Repairman

Responsible To:
- *Plant Superintendent

EMPLOYMENT OPPORTUNITIES

*Future prospects are good for maintenance electricians.
*Maintenance electricians are employed by government and private plants, offices, hospitals, schools, and other buildings serviced by electrical systems.

**Iowa employment opportunities for this occupation are included in the Career Education Needs Information Survey (CENIS) which will be available at a later date.

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PREPARATION AND TRAINING

*A high school diploma or the equivalent is required for apprenticeship training.
*You should be between 18 and 24 years old.
*A four year apprenticeship program for electricians is available.
*A course in electricity or electronics from a community college, or a vocational-technical school is recommended.

Helpful High School subjects:
- *English
- *Shop
- *General Math
- *Physics

Schools offering Electrical or Electronics courses:

Des Moines Area Community College +
2006 Ankeny Blvd.
Ankeny, Iowa 50021

Eastern Iowa Community College +
627 W. Second St.
Davenport, Iowa 52801

Kirkwood Community College +
6301 Bowling St., S.W.
Cedar Rapids, Iowa 52406

North Iowa Area Community College +
500 College Dr.
Mason City, Iowa 50401

Southeastern Iowa Area Community College +
Hwy. 34 West
Burlington, Iowa 52601

Western Iowa Tech +
3075 Floyd Blvd.
Sioux City, Iowa 51105

Area I Vocational-Technical School
142 Main St.
Calmar, Iowa 52132

Hawkeye Institute of Technology +
Hwy. 57 & Airline
Waterloo, Iowa 50704

Indian Hills Community College +
Municipal Airport
Ottumwa, Iowa 52501

Iowa Valley Community College +
22 W. Main St.
Marshalltown, Iowa 50158

Northwest Iowa Vocational School +
Hwy. 18
Sheldon, Iowa 51201

+Approved for training by Veterans Administration

WHERE TO GET MORE INFORMATION

*Ask your school counselor

Internat'l. Brotherhood of Electrical Workers
1200 15th St., N.W.
Washington, D.C. 20036

Edison Electric Institute
90 Park Ave.
New York, New York 10016

National Ass'n. of Homebuilders
1625 "L" St., N.W.
Washington, D.C. 20036

Nat'l. Joint Apprenticeship & Train
Committee for the Electrical Indust
1730 Rhode Island Ave., N.W.
Washington, D.C. 20036

Master Builders of Iowa
221 Fort St.
Des Moines, Iowa 50303

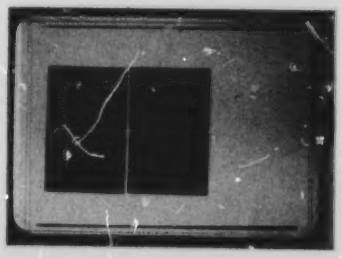
APPENDIX B

ECTRICIAN (MAINTENANCE)

JOB TITLE D.O.T.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

IowaScript



XEMPLARY PROJECT IN CAREER EDUCATION DEVELOPED IN COOPERATION WITH THE IOWA DEPT. OF PUBLIC
UCTION AT DES MOINES AREA COMMUNITY COLLEGE ANKENY, IOWA 50021

25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46

'616 Fit RT® Brand Aperture & Camera Cards and DUPLICAT Br Copy Card Product of 3M C ny, St. Paul, M

APPENDIX C

IowaScript

Education Opportunities
At
DES MOINES AREA COMMUNITY COLLEGE
2006 Ankeny Blvd.
Ankeny, Iowa 50021

WELDING

September, 1973

The curriculum for this two quarter program provides a sound foundation in the principles and practices of oxy-acetylene, arc, and inert gas shielded welding processes. The sincere student will not only have the opportunity to learn the "how" to fabricate metal in the shop, but also the "why" in technical related classes such as blueprint reading, metallurgy, and safety.

PROGRAM OF STUDY:

First Quarter	Second Quarter
Oxygen-Acetylene Welding & Cutting	Plasma Arc Welding & Cutting
Welding Skills & Practices	Submerged Arc Welding
Arc Welding I	Arc Welding II
Plastic Welding & Fabrication	Metallic Inert Gas Welding
Related Math	Tungsten Inert Gas Welding
	Inert Shield Welding
	Blueprint Reading

CAREER OPPORTUNITIES: Welders may be employed in:
- Manufacturing
- Construction Trades
- Maintenance
- Self-Employment

MONTHLY STARTING SALARY OF WELDING GRADUATES:

High	Average	Low
$845	$566	$352

HIGH SCHOOL SUBJECTS THAT WILL BE HELPFUL:
- Drafting
- Metal Shop
- Basic Mathematics

ADMISSION PROCEDURES:
1. Make application for admission
2. Submit school records
3. Take the General Aptitude Test Battery
4. Complete health examination
5. Come in for a counseling interview (if requested)

COST: Approximate cost for the two quarter program is $377. This includes tuition, fees, books, and supplies.

cg

des moines area community college
2006 ANKENY BLVD., ANKENY, IOWA 50021
PHONE 964-0651

an exemplary project in career education developed in cooperation with the iowa department of public instruction

July, 1973
Revised
Oct. 30, 1973

INDEX

make this deck by putting pink cards in FF.

Des Moines Area Community College
Career Education Programs

CARD TITLE	PROGRAMS
Index - Accounting Programs	Index Accounting Specialist Bookkeeping & Accounting
Agri-Business Programs	Agricultural Supply Commercial Horticulture
Child Care Programs	Child Care Child Care Associate
Criminal Justice Programs	Community Corrections Associate Criminalistics Industrial Security Law Enforcement
Data Processing Programs	Computer Operator Computer Programmer Key Punch Operator
Electronics Programs	Electronic Maintenance Electronics Technology
Graphic Arts Programs	Architectural Drafting Commercial & Advertising Art Mechanical Drafting Printing
Health Programs (Card #1)	Associate Degree Nursing Dental Assistant Dental Hygienist Health Care Administration Medical Assistant
Health Programs (Card #2)	Medical Laboratory Assistant Medical Laboratory Technologist Medical Secretary Operating Room Technician Practical Nursing Respiratory Therapy
Hospitality Programs	Commercial Cooking Hotel & Restaurant Management
Marketing Programs	Banking Consumer Credit Management Fashion Merchandising Industrial Marketing Insurance Merchandising Operations Real Estate Retail Marketing Securities

CARD TITLE	PROGRAMS
Mechanics Programs	Auto Mechanics Auto Parts Specialist Diesel & Heavy Equipment Repair
Office Programs	Clerical Executive Secretarial Key Punch Operator Legal Secretary Medical Secretary Secretarial
Public Service Programs	Alcohol & Drug Rehabilitation Associate Community Journalism Community Mental Health Associate Developmental Disabilities Associate Fire Science Technician Labor Management Recreational Leadership Social Services Associate
Trade & Industry Programs	Bricklaying Building Trades Conditioned Air Job Shop Machinist Tool & Die Making Welding

APPENDIX D

APPRENTICE MANUFACTURING

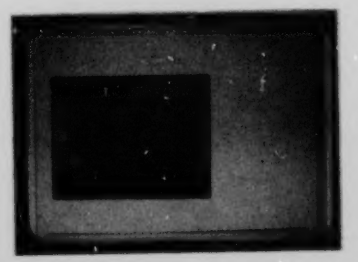
JOB TITLE D.O.T.

AN EXEMPLARY PROJECT IN CAREER EDUCATION DEVELOPED IN COOPERATION WITH THE IOWA DEPT. OF PUBLIC INSTRUCTION AT DES MOINES AREA COMMUNITY COLLEGE ANKENY, IOWA 50021

MMM 7616 FILMSCRIPT® Brand Aperture & Camera Cards and DUPLICARD® Brand Copy Cards – Product of 3M Company, St. Paul, Minn.

APPENDIX E

JOB TITLE D.O.T.



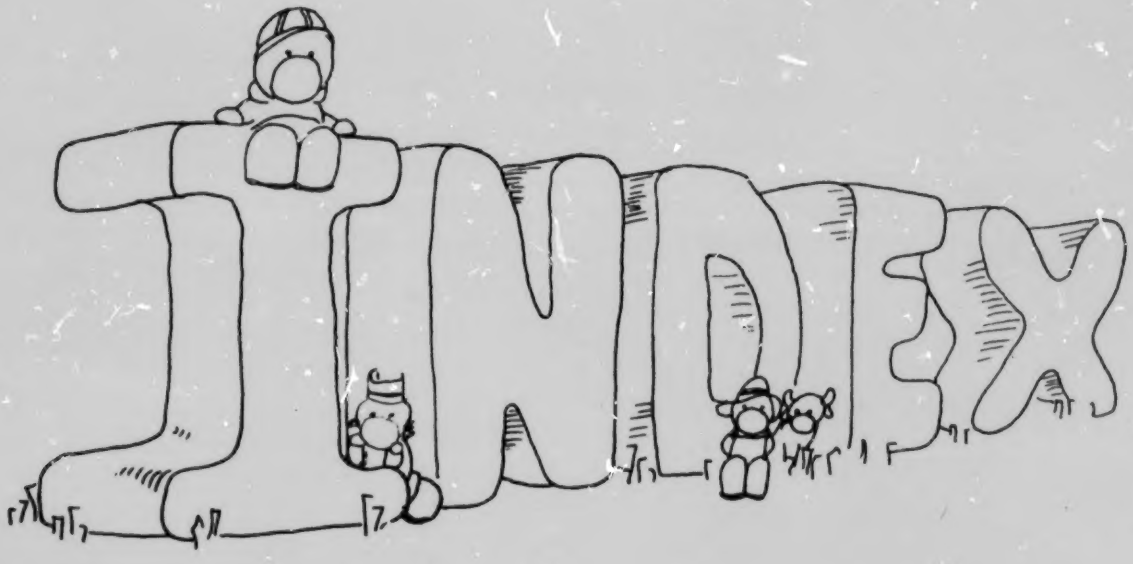
AN EXEMPLARY PROJECT IN CAREER EDUCATION DEVELOPED IN COOPERATION WITH THE IOWA DEPT. OF PUBLIC INSTRUCTION AT DES MOINES AREA COMMUNITY COLLEGE ANKENY, IOWA 50021

MMM 7616 FILMSORT® Brand Aperture & Camera Cards and DUPLICARD® Brand Copy Card's -- Product of 3M Company, St. Paul, Minn.

APPENDIX F

IowaScript

1973-74



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On the following pages, you will find an alphabetical list of the IOWAscript occupational briefs.

The first title is spelled out in full, and immediately following it in parenthesis is the abbreviated title as it appears on the aperture cards in your deck. The D.O.T. number is after the abbreviated title, and is followed by a short job description.

The number in front of the title is the cluster number as it is notched on the top of the aperture card.

Cluster
Number

7 ADMITTING CLERK 237.368
An admitting clerk interviews hospital patients or relatives to get required information for admittance. The admitting clerk may also collect initial payments, or refer the patient to the credit office. A clerk provides sympathetic, courteous service to assist patients in adjusting to the hospital or institution.

1 AGRICULTURAL-CHEMICAL SALESPERSON (AGRICULTURAL-CHEMICAL SALES) 266.258
An agricultural-chemical salesperson sells chemicals, pesticides, and fertilizers to farmers and livestock producers. A part of the sales work is to help identify diseases, insects, soil problems, and then recommend what chemicals or fertilizers will solve the problems.

1 AGRICULTURAL EQUIPMENT SALESPERSON (AGRICULTURAL EQUIPMENT SALES) 277.358
The agricultural equipment salesperson discusses farm equipment and implements with prospective customers, demonstrates the machines, points out features, and attempts to persuade prospective customers to buy them.

1 AGRICULTURAL FEED SALESPERSON 262.358
An agricultural feed salesperson discusses feeding programs for all kinds of livestock and poultry with customers. The salesperson helps plan the most profitable feeding plans using the products and farm grown grains, convincing the customer to buy the product.

5 AIR CONDITIONING & REFRIGERATION MECHANIC (AIR COND & REFRIGERATION MECH) 637.281
Air conditioning and refrigeration mechanics are skilled workers who install and repair air conditioning and refrigeration equipment in homes, offices, buildings, factories, food stores, restaurants, and other establishments.

4 AIR HAMMER OPERATOR 859.887
An air hammer operator uses tools run by compressed air to break up asphalt, concrete, stone, or to pack earth and clay. The operator drills holes in concrete and performs other jobs necessary to road or building construction.

15 AIR TRAFFIC CONTROLLER 193.168
An air traffic controller coordinates movement of air traffic from the airport control tower. The controller answers radio calls and assists arriving and departing flights.

15 AIRCRAFT MECHANIC 621.281
The aircraft mechanic repairs engines or structural parts of airplanes. Mechanics at smaller airports usually work on many kinds of light aircraft. City airports have many specialists; especially in jet liner repair facilities.

15 AIRLINE PILOT - CO-PILOT 196.283
Airline pilots and co-pilots are responsible for operating a multi-million dollar plane and transporting many passengers and goods safely for airlines.

15 AIRLINE RESERVATIONIST 912.368
Airline reservationists give flight information, sell space on commercial planes, and record reservations as they are made. They work directly with passengers on their travel problems, and provide a number of services for them.

Cluster
Number

15 AIRLINE STEWARDESS/STEWARD 352.878
An airline stewardess/steward assists all passengers boarding planes, and helps them find their seats, etc. The stewardess/steward serves meals and refreshments in flight, and attends sick passengers.

7 AMBULANCE ATTENDANT 355.878
Ambulance attendants assist in lifting patients on carts or stretchers and into the ambulance. They give first aid, such as bandaging, splinting, and oxygen.

5 APPLIANCE REPAIRMAN 723.381
An appliance repairman repairs electric and gas appliances that do not work. The repairman may work in a shop, a customer's home, or in a business

1 ARTIFICIAL BREEDING TECHNICIAN 467.384
An artificial breeding technician breeds cattle using modern scientific techniques, and consults with farmers concerning cattle breeding problems.

9 ASSEMBLER 723.884
An assembler installs parts of all kinds in sub-assemblies, usually on a production line.

8 ATHLETE (Professional) 153.348
A professional athlete participates in individual or team sports for pay. The athlete may work part-time or full-time.

11 AUCTIONEER 294.258
An auctioneer conducts sales where interested persons can bid on items they wish to purchase.

15 AUTO PARTS COUNTERMAN 289.358
An auto parts counterman dispenses auto parts over a counter in an automobil dealership or specialized supply store.

15 AUTOMOBILE BODY REPAIRMAN 807.381
The automobile body repairman is a skilled metal craftsman who repairs motor vehicle bodies damaged by collision, accident, corrosion, or in other ways.

15 AUTOMOBILE MECHANIC 620.281
The automobile mechanic keeps the nation's rising number of automobiles, small trucks, and buses in good running order.

11 AUTOMOBILE SALESPERSON 280.358
The automobile salesperson sells new or used cars and trucks. The salesperson is an important link between the manufacturer, the dealer, and the customer.

15 AUTOMOBILE UPHOLSTERER 780.381
An automobile upholsterer repairs or replaces upholstery in automobiles, trucks, buses, motorcycles, and boats. Old upholstery including carpeting, seat covers, padding, door panels, and convertible tops are removed. The upholsterer uses a variety of hand and machine tools.

Cluster
Number

15 AUTOMOBILE WASHER 919.887
Automobile washers clean and wax the outsides of cars, trucks, and buses. They also dust the seats, floors, windows, and dashboards.

5 BAKER 526.781
Bakers are skilled food service workers who bake and prepare bread and other bakery goods for households, commercial eating establishments, and institutions.

12 BANK TELLER 212.368
A bank teller receives and pays out money to customers, and keeps records of these transactions.

13 BARBER 330.371
Barbers and apprentice barbers provide a personal service for customers. They cut, style, and shampoo hair according to the instructions of their customers. They give massages, tint hair, and fit wigs and toupees.

8 BARTENDER 312.878
A bartender prepares all kinds of alcoholic and non-alcoholic drinks for customers in restaurants, hotels, bars, and other establishments which serve food and drink.

13 BEAUTY OPERATOR 332.271
Beauty operators (hairdressers, cosmetologists, and beauticians) provide their customers with a variety of services largely related to the care of the hair, face, and hands.

12 BILLING CLERK 219.388
Billing clerks prepare bills for customers. They may price products, compute wages, interest, and discounts. They usually operate several office machines.

12 BOOKKEEPER 210.388
A bookkeeper keeps records of financial transactions for business and other establishments.

15 BRAKE & FRONT END MAN 620.281
A brake and front end man specializes in repair of auto brakes, front wheel alignment, and steering mechanisms.

4 BRICKLAYER 861.381
A bricklayer uses masonry materials and mortar to build walls, fireplaces, chimneys, and other structures.

3 BROADCAST TECHNICIAN 957.282
Broadcast technicians operate the electronic equipment which controls the signal from a radio or television station. They are responsible for the technical quality of the programming.

8 BUSBOY 311.878
A busboy works in a restaurant or cafeteria. The busboy clears and sets tables, and may help serve food.

Cluster Number

11 BUYER (Department Store) 162.158
Buyers are key persons in a retail operation as they select the goods to be carried in the store. They also direct the sales program for the items purchased.

4 CABINETMAKER 660.280
A cabinetmaker makes and puts in cabinets, countertops, and various types of wooden cupboards.

8 CAMP COUNSELOR 159.228
The camp counselor organizes and often instructs recreational activities of children or adults at vacation or work camps.

11 CANVASSER 293.358
A canvasser contacts individuals to collect information or solicit money for a specific purpose.

8 CAR HOP 311.878
A car hop serves food and refreshments to people in their cars.

4 CARPENTER 860.381
A carpenter constructs, erects, installs, and repairs structures and fixtures of wood, plywood, and wallboard using handtools and power tools.

11 CASHIER 211.368
Cashiers receive money or checks from customers for goods or services. They may keep a record of all transactions. Some cashiers receive money from departments in a store, and keep records of each department's sales.

11 CASHIER CHECKER 299.468
A cashier checker receives money (or legal tender) from customers or employees in payment for goods or services, and keeps records of all transactions.

8 CATERER 187.168
A caterer plans menus and prepares food, usually for large groups of people to be served for specific occasions.

4 CEMENT MASON 844.884
A cement mason finishes concrete for all types of construction work.

7 CENTRAL SERVICE TECHNICIAN 223.887
Central service technicians work in a hospital's central service department. They are responsible for the storage and distribution of medical and surgical supplies and equipment related to patient care.

13 CHILD DAY CARE WORKER 307.878
A child day care worker operates a day care home for young children. Duties include feeding the children, supervising play, and rest periods.

11 CLAIM ADJUSTER 241.168
A claim adjuster investigates claims for loss or damages filed in connection with insurance policies, and tries to make a settlement out of court.

Cluster
Number

13 CLEANER & PRESSER 369.782
A cleaner and presser operates pressing equipment, a sewing machine, and uses chemical cleaning agents to press, alter, repair, and clean garments.

12 CLERK-TYPIST 209.388
A clerk-typist is in the center of a business or institution's communication system. It is the responsibility of a clerk-typist to maintain work flow and provide accurate and current records.

11 COMMERCIAL ARTIST 141.081
A commercial artist is responsible for drawings, paintings, and layout designs of advertising displays in newspapers, magazines, and other media.

12 COMPUTER OPERATOR 213.382
A computer operator processes all kinds of data on electronic digital computers.

12 COMPUTER PROGRAMMER 020.188
A computer programmer uses detailed coding systems to design programs that enable computers to perform specific functions. Programmers may also instruct operators in methods and procedures.

4 CONSTRUCTION WORKER 869.884
Construction workers are primarily, unskilled laborers who perform a variety of jobs in the construction of buildings, highways, dams, pipelines, and water and sewer projects.

8 COOK & CHEF 313.131
Cooks and chefs prepare meals served in restaurants, motels, hotels, hospitals, and any of a variety of institutions that house people.

12 COURT REPORTER 202.388
Court reporters record every word spoken during a court session and transcribe notes for a permanent record. They may also have to read back proceedings while court is in session.

12 CREDIT CLERK 249.368
A credit clerk checks the applications of people who want loans and credit.

7 CYTOTECHNOLOGIST 078.281
Cytotechnologists prepare and screen microscope slides of human cells searching for signs of cancer or other diseases.

6 DANCER 151.048
A dancer may perform alone, with a partner, or with a group to entertain people in theaters, night clubs, at parties, or on television.

11 DARKROOM TECHNICIAN 976.381
A darkroom technician works in a photographic darkroom developing pictures or other types of exposed photographic film.

Cluster
Number

7 DENTAL ASSISTANT 079.378
Dental assistants assist the dentist during examination and treatment of patients. They are responsible for sterilization of instruments and linens, and relieve the dentist of routine duties.

7 DENTAL HYGIENIST 078.368
A dental hygienist works under the direction of a dentist. The work includes cleaning teeth, taking X-rays, and other routine services.

7 DENTAL LABORATORY TECHNICIAN 712.381
Dental laboratory technicians make dentures, teeth, crowns, bridges, and other dental work. They do not deal directly with patients, but receive prescriptions from dentists and work in a laboratory.

15 DIESEL MECHANIC 625.281
Diesel mechanics repair or replace defective parts of a diesel powered engine. They may periodically inspect, test, and adjust to avoid trouble before it starts.

7 DISPENSING OPTICIAN 713.251
A dispensing optician fits and adjusts glasses from prescriptions. Some opticians also do related laboratory work on glasses.

5 DOMESTIC HELPER 306.878
A domestic helper (or housekeeper) works in private homes, hotels, and hospitals where keeping things clean and neat is an important daily task.

4 DRAFTSMAN (Mechanical) 007.281
Draftsmen are essential to every industry that produces goods which consist of fabricated and assembled materials. The draftsman's task is to convey the designer's ideas to the production workers.

4 DRY WALL INSTALLER & FINISHER 842.884
A dry wall installer fastens sheetrock panels in place. The finisher covers the cracks between the panels, and finishes the entire wall surface. Most of the work is in new homes and commercial constructions.

4 ELECTRICIAN (Construction) 842.281
A construction electrician, or inside wireman, lays out, installs, and tests all electrical fixtures, appliances, and wiring used in the electrical systems of structures.

9 ELECTRICIAN (Maintenance) 829.281
A maintenance electrician keeps the electrical systems in buildings, factori or institutions working properly, and repairs them when necessary. Some may called electrical repairmen.

7 ELECTROCARDIOGRAPH TECHNICIAN 078.368
An electrocardiograph technician gives the E.K.G. or E.C.G. test to trace th electrical impulses coming from the heart muscle.

7 ELECTROENCEPHALOGRAPH TECHNICIAN 078.368
An electroencephalograph technician operates an instrument that records brai waves.

Cluster
Number

9 ELECTRONICS TECHNICIAN 003.181
An electronics technician helps the electronic engineer in all phases of electronic design, installation, repair, and testing.

2 ENVIRONMENTAL HEALTH ASSISTANT 168.287
An environmental health assistant, sometimes called a local health sanitarian, aids environmental engineers, sanitarians, physicians, and veterinarians in service related to collecting data, inspecting, and evaluating facilities concerned with public health.

1 FARM EQUIPMENT MECHANIC 624.281
The farm equipment mechanic maintains, repairs, and overhauls farm machinery, equipment, vehicles, and other mechanized equipment on farms or in farm-equipped repair shops.

1 FARM ASSISTANT 421.883
A farm assistant does various jobs connected with the general farming operation.

1 FARMER 421.181
A farmer produces grain, meat animals, fiber or fresh food produce. Many farmers specialize in one type of production depending on their soil, climate, market, or other local conditions.

12 FILE CLERK 206.388
File clerks, or junior clerks, place materials in files and secure needed material from files. They may have to search files for special materials, make reports, and keep files up-to-date.

14 FIRE FIGHTER 373.884
Fire fighters in city and town fire departments protect life and property from fire, whether it's a smoldering trash fire that can be brought under control with a hand fire extinguisher, or a spectacular blaze requiring equipment from several fire companies.

15 FLIGHT ENGINEER 621.281
A flight engineer makes all adjustments before, during, and after a flight to insure safe and efficient operation of the airplane.

4 FLOOR COVERING INSTALLER 864.781
A floor covering installer installs all types of decorative floors such as carpeting, rugs, vinyl, and other soft tiles.

5 FLORAL DESIGNER 142.081
A floral designer plans and makes bouquets, corsages, wreaths, and center pieces. The designer may plan and decorate for special events such as parties and weddings.

11 FLORIST 040.081
A florist owns or manages a flower shop, and is responsible for purchasing, selling, and advertising the many different types of decorative items.

9 FORK LIFT DRIVER 922.883
A fork lift driver operates various kinds of trucks with hydraulic lifts which carry materials from one place to another.

Cluster Number

9 FORK LIFT MECHANIC 620.281
A fork lift mechanic maintains and repairs fork lift trucks. The mechanic must have knowledge of both gas and electric motors, as well as hydraulic systems.

9 FOUNDRY WORKER 519.887
A foundry worker performs any of the unskilled tasks involved with the production of metal castings used as essential parts in everything from automobile engines to cooking utensils.

4 FURNACE INSTALLER 862.381
A furnace installer uses blueprints or other specifications to install oil, gas, and electric heating units. An installer also connects the electrical wiring and the controls necessary for the operation of these units.

4 GLAZIER 865.781
A glazier cuts and installs glass in homes, business offices, and other buildings. Some specialize in an area such as windshield installation in cars and boats.

1 GRAIN BUYER 162.168
A grain buyer buys grain for resale to processors or on order from grain processing plants. A buyer may manage a grain elevator, or be employed by a grain handling company.

1 GROUNDSKEEPER 407.884
A groundskeeper cares for grounds, lawns, trees, shrubbery, and gardens. A groundskeeper may be known by a number of titles: groundskeeper, gardener, or turfbuilder.

14 GUARD (Watchman) 372.868
A guard protects property from damage or loss from fire, robbery, intruders, and other hazards. A guard also helps to keep order at large gatherings.

4 HEAVY EQUIPMENT OPERATOR 859.883
A heavy equipment operator operates power-driven equipment other than that used for transportation. An operator also runs, maintains, and performs some repairs on varying types of construction machinery.

7 HISTOLOGIC TECHNICIAN 078.381
A histologic technician cuts and stains paper thin sections of body tissue so they can be examined microscopically by a pathologist for possible evidence of disease.

8 HOTEL OR MOTEL MANAGER 187.118
A hotel or motel manager is responsible for all departments of the hotel or motel. The manager assumes the responsibility for running a profitable business and assures the guests comfortable lodging.

7 INHALATION THERAPIST 079.368
An inhalation therapist works with a doctor in treating patients who have breathing problems, or who need to take medication by inhalation.

Cluster
Number

9 INSPECTOR (Factory) 609.684
A factory inspector is responsible for detecting flaws in individual parts or a finished manufactured product.

11 INSURANCE SALESPERSON 250.258
An insurance salesperson, also known as an insurance agent, sells insurance policies and contracts which protect lives and property against future loss; as well as, assisting individuals and businesses in the planning aspects of insurance coverage.

5 INTERIOR DECORATOR 142.051
An interior decorator plans the useful arrangement of inside space in homes, offices, and other buildings which will be decorated. The decorator also suggests or selects wall coverings, carpeting, furniture, and other decorations.

14 JANITOR 382.884
A janitor keeps buildings clean, sanitary, orderly, and runs the heating and cooling systems so that the buildings are pleasant and comfortable.

12 KEY PUNCH OPERATOR 213.582
A key punch operator uses a machine with a keyboard much like an electric typewriter, depressing proper keys in correct sequence to punch data into cards.

8 KITCHEN HELPER 318.887
A kitchen helper assists the cook by performing a variety of routine, unskilled duties. A helper has the responsibility for the cleanliness of the kitchen area, and may be asked to set tables, prepare food trays, and assist in the serving of trays.

12 LEGAL SECRETARY 201.368
A legal secretary works in a law office for one or more lawyers. Special knowledge of legal terms and law is necessary as well as general secretarial skills.

3 LIBRARY ASSISTANT 294.368
A library assistant helps professional librarians by checking books in and out, shelving books, and doing other duties that do not require professional skills.

14 LINEMAN 821.381
A lineman with both the electric power and the communication industries is responsible for the installation and maintenance of poles and lines which carry power or telephone messages to homes and businesses.

1 LIVESTOCK BUYER 162.158
A livestock buyer purchases livestock from yards and livestock raisers for company use, for resale to packing houses, or for private individuals.

5 LOCKSMITH 709.281
A locksmith installs and maintains locks. The locksmith also makes new keys using handtools and special tools. The locksmith may also be called on to "pick locks" if keys are lost.

Cluster
Number

9 MACHINIST 600.280
The journeyman or all-around machinist carries through to completion the construction of metal repair parts, tools, and machines from written specifications such as blue prints, engineering sketches, or dimensions.

8 MAGICIAN 159.048
A magician performs original and stock tricks of illusion to entertain and mystify an audience.

14 MAIL CARRIER 233.388
A mail carrier is responsible for delivering and collecting the mail in a specifically assigned area.

13 MAIL CLERK 231.588
A mail clerk sorts incoming mail and directs it to the proper office. The cl stamps and prepares outgoing mail for delivery to the post office.

9 MAINTENANCE WORKER 899.381
A maintenance worker is employed in factories and office buildings, as well as in many other settings, and is primarily responsible for the maintenance o physical structures and equipment. Hand and power tools are used in this job

9 MAINTENANCE MECHANIC (Industrial) 638.281
A maintenance mechanic dismantles or partially dismantles machines and other equipment, repairs or replaces parts, and reassembles equipment in industrial and manufacturing firms.

11 MEAT CUTTER 316.884
Meat cutters work in retail markets and wholesale plants. They cut, package, and display meat, poultry, and fish.

11 MEAT PACKAGER 920.887
A meat packager wraps meat for display to customers after it has been cut.

7 MEDICAL ASSISTANT 079.378
A medical assistant, under the direction of a physician, aids in treatment and examination of patients, and performs other routine duties.

7 MEDICAL LABORATORY ASSISTANT 078.381
A medical laboratory assistant performs routine laboratory tests for use in diagnosis and treatment of illness, under the supervision of a licensed medical technologist, pathologist, or qualified physician.

7 MEDICAL RECORDS LIBRARIAN 100.388
A medical records librarian prepares, maintains, and analyzes statistics and records on patients' illnesses and treatments.

7 MEDICAL SECRETARY 201.368
A medical secretary works in a doctor's office, clinic, or hospital. The work may include taking dictation, transcribing material from a sound recorder, or preparing medical histories and other records.

Cluster
Number

7 MEDICAL TECHNOLOGIST 078.381
A medical technologist is licensed to perform microscopic, chemical and bacteriological tests under the direction of a pathologist for use in diagnosis and treatment of disease.

14 METER MAID 375.588
A meter maid patrols an assigned area to issue tickets for overtime parking violations.

14 METER READER 239.588
Meter readers are employed by a utility company or city to read gas, water, or electric meters. They record the readings and compute the units used for later billing.

14 MILITARY OPPORTUNITIES
The Military Service offers jobs in many fields where the occupations are many and varied.

9 MILLWRIGHT 638.281
A millwright installs machinery and equipment in an industrial establishment such as a factory.

11 MODEL 297.868
Models pose for artists and photographers. They model clothing in showrooms, fashion shows, and in some cases, display and demonstrate merchandise at trade shows on television.

13 MORTICIAN 338.381
A mortician or funeral director arranges and directs all aspects of a funeral.

8 MOTION PICTURE PROJECTIONIST 960.382
A motion picture projectionist works from an elevated room at the back of the theater and operates projection machines and audio equipment.

15 MOTORCYCLE MECHANIC 620.281
A motorcycle mechanic repairs and overhauls motorcycles, motor scooters, and similar motor vehicles.

15 MUFFLER & EXHAUST INSTALLER 807.884
A muffler and exhaust installer replaces defective mufflers and pipes on automobiles, buses, and trucks.

3 NEWSPAPER REPORTER 132.268
A newspaper reporter gathers information on current happenings and writes stories for publication in daily or weekly newspapers.

7 NURSE (Industrial) 075.378
An industrial nurse takes care of people who get sick or are hurt in department stores, factories, and office buildings.

7 NURSE (Licensed Practical) 079.378
A licensed practical nurse performs services in caring for and treating the ill under the supervision of a physician or a registered nurse.

Cluster
Number

7 NURSE (Nurse Registered) 075.368
A registered nurse takes care of sick or injured people in hospitals, homes, doctor's offices, or other institutions. A nurse also gives medicine and treatment under the direction of a doctor.

7 NURSE'S AIDE 355.878
A nurse's aide or hospital attendant performs certain duties not requiring professional training for the hospitalized patient. The aide works under close supervision of a professional nurse.

7 NURSING HOME ADMINISTRATOR 187.118
A nursing home administrator coordinates and directs educational, security, recreational, and rehabilitation programs, as well as supervising the physical facilities.

7 OCCUPATIONAL THERAPY AIDE 079.368
An occupational therapy aide assists the registered occupational therapist in using activities as treatment in the rehabilitation of persons with mental or physical disabilities.

12 OFFICE MACHINE OPERATOR
An office machine operator uses office machines to perform mathematical calculations, records business transactions, and reproduces copies of written material and other data. The clerk who runs the machines may have a title that indicates the type of machine operated.

12 OFFICE MACHINE SERVICEWORKER 633.281
An office machine serviceworker inspects, adjusts, repairs, and cleans such machines as typewriters, duplicating machines, and calculators.

7 OPTICAL TECHNICIAN 713.381
An optical technician sets up and operates machines to grind eyeglass lenses to prescription specification and sets lenses into frames.

7 ORDERLY 355.878
An orderly performs numerous tasks in contributing to the comfort and welfare of patients. The orderly works under the close supervision of registered professional nurses and resident physicians.

4 PAINTER 840.781
The construction and maintenance painter, with a knowledge of paints and other covering materials, applies decorative and protective coatings to all kinds of structures. The qualified journeyman can perform all of the functions of any project.

4 PAPERHANGER 841.781
A paperhanger covers interior walls and ceilings with decorative wallpaper or fabric.

2 PARK CUSTODIAN 407.868
A park custodian is responsible for all activities within the park where assigned. The duties may include directing traffic, camp ground supervision, lake patrol, and repair work.

Cluster Number

15 PARKING LOT ATTENDANT 915.878
A parking lot attendant is responsible for parking, storage, and safety of the customer's car in an attendant's lot.

5 PEST CONTROL TECHNICIAN 389.884
A pest control technician is employed to get rid of all kinds of pests in homes, factories, business offices, and other buildings.

3 PHOTOGRAPHER 143.062
A photographer uses a variety of cameras to take pictures that may be used for portraits, commercial, or industrial purposes.

7 PHYSICAL THERAPY ATTENDANT 355.878
A physical therapy attendant aids a registered physical therapist in a planned program of patient rehabilitation for the purpose of correcting or preventing certain physical conditions.

4 PLUMBER & PIPEFITTER 862.381
Plumbers and pipefitters install, repair, and maintain piping systems used to carry water, steam, and gases as needed in homes, businesses, and other structures.

14 POLICEMAN 375.268
A policeman is in charge of the basic law enforcement duties of keeping the peace and protecting life and property in the city. The deputy sheriff performs identical duties in the unincorporated areas of the county.

5 PORTER (Cleaner) 381.887
A porter keeps an office building, apartment house, or other commercial building clean and orderly.

14 POST OFFICE CLERK 232.368
A post office clerk performs a series of functions which are necessary for sorting, distributing, and processing the mail at various stages from mailing to delivery.

3 PRINTER 973.381
Printers work for newspapers and commercial printing companies. They set type, and operate a printing press.

9 PRODUCTION MACHINE OPERATOR 609.885
A production machine operator reads work orders or blueprints, puts materials into the machines, checks the material size using gauges, and oils and cleans the machines.

7 PSYCHIATRIC AIDE 355.878
Under the supervision of doctors and professional nurses, the psychiatric aide assists in the personal nursing care for patients in mental centers or state hospitals.

15 PUBLIC TRANSIT DRIVER 913.463
A public transit driver takes people and goods across town or around the local area in trucks, buses, vans, or taxis.

Cluster
Number

3 RADIO & T.V. ANNOUNCER 159.148
A radio and T.V. announcer presents news, live commercials, introduces programs, describes sporting events, acts as master of ceremonies, conducts interviews, and identifies stations.

11 REAL ESTATE SALESPERSON 250.358
A real estate salesperson works for a broker, and shows, sells, and rents property.

11 RECEIVING & SHIPPING CLERK 222.387
A receiving and shipping clerk does the clerical work necessary to enable manufacturing companies, wholesalers, and other business firms to keep track of goods transferred from one place to another.

12 RECEPTIONIST 237.368
A receptionist's main job is greeting people who come into the office and directing them to the proper department or staff member who can help them.

8 RESTAURANT MANAGER 187.168
A restaurant manager's position may range from managing large luxury eating places to owning and operating small restaurants. The manager must see that a smooth, efficient, and profitable operation is maintained.

4 ROOFER 866.381
A roofer is a skilled construction tradesman who applies materials such as tile, slate, and composition roofing to roofs.

11 ROUTEMAN 292.358
A routeman drives a panel or light truck over an assigned route selling and delivering goods, either to retail businesses or directly to the public.

11 SALESPERSON 290.478
A salesperson helps customers upon request in locating desired merchandise. The salesperson also may help the customer decide between various articles, and then return to the check stand to complete the purchase, collect payment, and bag the merchandise.

5 SEAMSTRESS 785.381
A seamstress makes, alters, and repairs garments according to a pattern or customer's specifications using a sewing machine or sewing by hand.

12 SECRETARY 201.368
A secretary takes dictation in shorthand, and transcribes notes into a typed business letter or report. There may be other duties; such as answering the telephone, handling routine business, making appointments, scheduling meetings, and opening and answering mail.

15 SERVICE STATION ATTENDANT 915.867
A service station attendant is primarily responsible for supplying customers with gas and oil in a service station. Attendants also perform other duties including cleaning windows, checking tires, and doing minor repair work.

Cluster
Number

9 SEWING MACHINE MECHANIC 639.281
A sewing machine mechanic repairs and adjusts sewing machines in homes and sewing departments of industrial establishments.

9 SEWING MACHINE OPERATOR 787.782
A sewing machine operator, using a heavier and faster machine than those found in homes, sews shoulder seams, hems blouses, makes pockets, collars, sleeves, and assembles these sections into the garment.

4 SHEET METAL WORKER 804.281
A sheet metal worker and an apprentice work from blueprints and drawings. A journeyman sheet metal worker performs all of the operations necessary to make and install articles of light gauge sheet metal.

5 SHOE REPAIRMAN 365.381
A shoe repairman repairs worn heels, soles, broken straps, and torn seams on all types of shoes. A repairman also restyles shoes by attaching ornaments, such as buckles and bows.

15 SMALL-ENGINE REPAIRMAN 625.281
A small-engine repairman repairs and rebuilds small gasoline, diesel, or electric engines.

14 SOIL CONSERVATION AIDE
A soil conservation aide assists a soil conservationist in developing soil saving plans and laying out structures such as terraces, ponds, and contour lines.

14 STATE TROOPER 375.268
A state trooper is a protective service officer whose primary work is to enforce the laws and regulations governing the use of state highways.

9 STATIONARY ENGINEER 950.782
A stationary engineer operates and maintains equipment such as boilers, industrial air conditioning systems, power generating equipment, etc., in large industrial or commercial firms.

12 STENOGRAPHER 202.388
A stenographer takes dictation, types, operates office machines, and performs other clerical duties.

15 STOCK CAR DRIVER 153.248
A stock car driver races autos in competition on a standard race track.

11 STOCK CLERK 223.387
A stock clerk is responsible for receiving, unpacking, verifying, storing, and issuing supplies and equipment in a storeroom or warehouse.

4 STONE MASON 861.781
Stone masons build stone structures such as peers, walls, and abutments. They also lay walk, curbstone, and do special types of stone work.

Cluster
Number

4 STRUCTURAL STEEL WORKER 801.781
A structural steel worker erects, assembles, or installs fabricated metal products for use in the construction of industrial, commercial, and large residential buildings.

7 SURGICAL TECHNICIAN 079.378
Surgical technicians assist doctors and nurses before, during, and after operations. They may also prepare the equipment and help the patient get ready for an operation. They may adjust the oxygen and the plasma supplies during an operation.

4 SURVEYOR-HELPER (Chainman) 018.188
A surveyor-helper assists the chief surveyor in making exact measurements and locations of points, lines, curves, and elevations on the earth's surface.

15 TAXI DRIVER 913.363
A taxicab driver provides transportation for individuals, on request, via automobiles. The driver also performs some personal services for taxicab users.

14 TEACHER AIDE 092.228
A teacher aide assists the classroom teacher by helping small groups or individuals with assignments, grading papers, supervising playgrounds and lunchrooms, or by performing clerical work.

3 TELEGRAPHER 203.588
Telegraphers send and receive messages on telegraph wires. They may use code or automatic machines which print out the messages.

3 TELEPHONE EQUIPMENT INSTALLER 822.281
A telephone equipment installer is a skilled worker who installs telephones and related equipment in homes and businesses.

3 TELEPHONE OPERATOR 235.862
There are two types of telephone operators: The central office operator for a telephone company who handles calls of all types that cannot be completed by the automated processes, and the P.B.X. operator who operates switchboards in businesses and other establishments.

11 TELEPHONE SOLICIOTR 293.358
A telephone solicitor sells or takes orders for goods and services over the telephone.

5 TELEVISION & RADIO REPAIRMAN 720.281
A television and radio repairman installs, repairs, and services not only television and radio receivers, but a growing number of electronic products.

6 THRILL PERFORMER 159.348
A thrill performer entertains audiences at fairs, carnivals, and circuses by performing daredevil feats.

6 TICKET TAKER 344.868
A ticket taker collects tickets from patrons at entertainment events.

Cluster
Number

15 TIRE MOUNTER 915.884
A tire mounter runs a machine that places tires on rims of wheels. The work may also include repairing damaged tires.

9 TIREBUILDER 750.884
A tirebuilder sets up and operates a drum-type machine to build up pneumatic tires.

9 TOOL & DIE MAKER 601.280
A tool and die maker is a highly skilled worker who makes the tools and dies used in shaping and forming metal and plastic parts.

15 TRANSMISSION SPECIALIST 620.281
A transmission specialist repairs manual and automatic transmissions in automotive vehicles.

13 TRAVEL AGENT 237.368
A travel agent helps persons plan trips, select transportation, and secure accommodations to best fit their needs.

15 TRUCKDRIVER 905.883
A truckdriver works within a certain area or over-the-road picking up, transporting, and delivering materials, goods, and products of all kinds. They also perform related duties which may vary widely from job-to-job.

12 TYPIST 203.588
A typist types letters, reports, stencils, forms, addresses, or other straight-copy material from rough draft or corrected copy.

5 UPHOLSTERER 780.884
An upholsterer takes off old covering from furniture, and puts on new covering or repairs the old covering using hand and power tools.

8 USHER 344.878
An usher helps people at entertainment events in finding seats, looking for lost things, locating restrooms and telephones, and hands out programs.

8 WAITRESS & WAITER 311.878
All waitresses and waiters have the single basic task of taking orders and serving food and beverages to customers in hotels and eating establishments.

7 WARD CLERK 219.388
A ward clerk acts as a receptionist in the ward or floor nursing unit. The clerk works under the direction of a registered nurse. The clerk keeps records, directs visitors, and performs other receptionist duties.

11 WAREHOUSE WORKER 922.887
A warehouse worker is basically responsible for the storage and movement of materials of all kinds in warehouses or other storage areas.

14 WASTE WATER TREATMENT PLANT OPERATOR (WASTE WATER TREATMENT PLANT OPER) 954.782
A waste water treatment plant operator operates equipment to cut down pollution in waste water before it enters streams or rivers.

Cluster
Number

5 WATCH & JEWELRY REPAIRMAN 715.281
A watch and jewelry repairman repairs, adjusts, and regulates watches, clocks, chronometers, and other electromechanical time-pieces, as well as repairing jewelry.

9 WELDER (Combination) 812.884
A welder joins pieces of metal or plastic together by placing them next to each other and melting the adjacent surfaces, causing them to intermix and form a fusion.

1 WILDLIFE & CONSERVATION TECHNICIAN (WILDLIFE & CONSERVATION TECH)
A wildlife and conservation technician studies, protects, controls, manages, and promotes the conservation and intelligent use of wild plant and animal life, wherever it occurs.

7 X-RAY TECHNICIAN 078.368
An X-ray technician takes X-ray photographs of various portions of the body to assist medical officers in detection of foreign bodies and diagnosis of diseases and injuries.

General Outline for Career Mini-Course

Instructor Note: All work is necessary and worthwhile. Never down-grade any occupation, it may be satisfying to the employed individual.

1. Objectives:

A. Student will understand relationship of personal attitudes, aptitudes, and abilities in relation to an occupation.

1) To be accomplished by completing the IOWAscript Career Study Guide 9-12. (Possibly use 7-9 guide in class)

a. Activities

1. Introduce World of Work concept as a learning process rather than a "by-chance" happening.

a) Use junior high worksheet as a 15 minute in-class exercise to start some thinking and discussion.
b) Job cluster concept:
1) Common denominator for many of 22,000 jobs
2) Explain job overlap into various areas
c) Assign personal part of 9-12 study guide

2. Discussion of personal abilities, likes, and needs as a part of career selection. Include salary needs and job demand relationship.

a) Assign occupational study for Career Exploration Guide.
1) Emphasize use of card sort system--a take-off place for selecting an occupation to research

b) Assign a personal interview worksheet. Use IOWAscript interview form 2A.
1) This may be a source for later bringing a resource person in to talk about an occupation
2) It may be necessary to role-play an interview

c) Emphasize the need to learn job requirements in relationship to self-expectations.
1) General discussion of worker needs
2) Discussion in small groups by area of selected jobs

d) Trips to local business and industry in small groups to observe selected occupations or similiar occupations.
1) Health--hospital
2) Business--bank
3) Agri-business - local grain elevator
4) Transportation--trucking firm
5) Etc.

B. Student will have knowledge of training program and/or method of entry for three occupations.

1) To be accomplished by comparing entry methods into a given occupation by:

1) On-the-job training
2) Special school
3) Apprenticeship

a. Activities

1. Emphasize cost of entry.

a) Select a given occupation and compare cost of entry projected over a five year period to include:

1) Cost of training
2) Wages lost because of training
3) Salary projection increase because of training
4) Length of employment to pay for training

2. Divide into three groups to explore and report back on types of training available for specific job and compare each--give oral reports to group.

3. Visit a community college.

4. Invite apprenticeship committee representative to meet with the group.

C. Student will have knowledge of the opportunities for employment in each of the 15 clusters.

1) To be accomplished by identifying three specific occupations within a cluster which have the strongest employment outlook.

a. Activities

1. Clarify cluster meanings and by discussion, look at those areas that offer most expansion due to replacement and new employees. Do not discourage a cluster--emphasize need to move to secure some jobs.

2. Have students identify three occupations and their cluster that offer strong employment possibilities--consider where students want initial employment to be geographically located.

D. Student will understand the methods of securing employment.

1) To be accomplished by:

1) Study of newspaper ads
2) Use of employment service
3) Use of local referral sources
4) Person-to-person contact

a. Activities

1. Use local and Des Moines want ad section to understand help wanted ads and interpretation of same.

2. Invite Iowa State Employment Service representative to speak to the class.

3. Develop a list of local employers.

4. Employment details:

1) Fill out a sample application form
2) Emphasize the need to be honest
3) Interview procedures:
   Appearance
   Role playing technique for interview
4) Discussion of employer demands

E. Students will have knowledge of payroll procedures.

1) To be accomplished by:

1) Study of paycheck deductions
2) Study of value of fringe benefits

a. Activities

1. Use three sample paychecks with deduction records.

1) Discuss each deduction

2. Discuss fringe benefits in relation to total salary.

1) Develop two possible job pay scales, one with and one without fringe benefits. Include pensions, health insurance, parking fees if in the city, vacation pay, overtime, unemployment insurance, accident insurance, special clothing, transportation allowance, credit unions, training available for advancement. Emphasize tax break on fringe benefits.

CAREER EDUCATION

READING COMPREHENSION

1. What are three occupations that require you to work out-of-doors most of the time? _____

_____

_____

2. What are three occupations for which you can get training at Kirkwood Community College? _____

_____

_____

3. What do you think is your greatest strength?

a. Good health
b. Patience
c. Physical strength
d. Good dexterity
e. Good in Math

List three occupations when this will help you: _____

_____

_____

4. Select the occupation in each group where you are most likely to work with people:

a. Barber
b. Locksmith
c. Auto Mechanic
d. Building Maintenance Man
e. Tool & Die Maker

a. Computer Programmer
b. Commercial Artist
c. Cashier
d. Bookkeeper
e. Carpenter

KB/cr

CAREER GUIDANCE PRACTICES

TYLER VOCATIONAL CARD SORT AS ADAPTED TO IOWAscript
A structured interview technique

Purposes:

1. To identify and clarify students' major ways of evaluating an occupation.
2. To encourage students to verbalize some preferences among occupations.
3. To broaden the range of occupational goals considered by students.
4. To identify blocks interfering with career exploration.

Background and Development:

The TVCS appears to have value as a counseling technique, because it offers the student a media for communicating his view of the occupational structure. The student not only sorts the cards in various ways, but is asked to report his reasons for groupings. He is encouraged to write out occupational titles on blank cards and add them to the deck, thus giving him an opportunity to effect both content and structure. The counselor can assist him in identifying and clarifying preferences among occupational titles, reasons for choices, and work values inferred from choices and reasons. Occupational titles provide cues which may elicit further discussions about broadening the range of occupational goals under consideration or obtaining accurate occupational information.

Instructions

Materials:

1. An IOWAscript deck of cards with an occupational title printed on each.
2. Five blank 3 x 5 note cards on which the student may write his current occupational preferences.
3. Three 4 x 6 note cards to label the groupings: "MIGHT CHOOSE", "WOULD NOT CHOOSE", and "IN QUESTION".
4. An instructional sheet to which the counselor can refer for an outline of the instructions.
5. A recording sheet upon which the counselor can record the student's sorting distribution and significant comments.

Instructions for Administration:

Suggested Introduction to the student: "THIS EXERCISE IS CALLED A VOCATIONAL CARD SORT. IT IS NOT A TEST. IT IS AN ACTIVITY DESIGNED TO ASSIST YOU TO CLARIFY YOUR THOUGHTS ABOUT PLANNING FOR AN OCCUPATION. THE PURPOSE IS TO IDENTIFY AND DISCUSS YOUR CHOICES REGARDING SEVERAL AREAS OF WORK.

*THIS PACK CONTAINS 200 CARDS WITH THE NAME OF AN OCCUPATION PRINTED ON EACH ONE. I WILL ASK YOU TO ARRANGE THE CARDS IN VARIOUS WAYS, AND WE CAN DISCUSS IT AS YOU PROCEED. I WILL BE WRITING DOWN SOME OF YOUR COMMENTS FOR OUR FUTURE USE."

Step 1

S is given the pack, and asked to sort them into three groups.

The first group ("MIGHT CHOOSE") is identified as: "OCCUPATIONS YOU MIGHT ACTUALLY CHOOSE, OR THAT HAVE SOME SPECIFIC APPEAL TO YOU, OR THAT HAVE POSSIBILITIES FOR A PERSON LIKE YOU."

*The counselor may eliminate some cards or clusters to speed the sort.

The second group ("WOULD NOT CHOOSE") is identified by repeating the description above in negative terms: "OCCUPATIONS YOU WOULD NOT CHOOSE, OR THAT DO NOT HAVE SOME SPECIFIC APPEAL TO YOU, OR THAT DO NOT SEEM TO HAVE POSSIBILITIES FOR A PERSON LIKE YOU."

The third group ("IN QUESTION") is identified as: "THOSE OCCUPATIONS ABOUT WHICH YOU ARE INDIFFERENT, UNCERTAIN OR IN QUESTION."

Step II

Remove all materials except the "WOULD NOT CHOOSE" stack.

Spread these cards out in front of S so that all can be seen, with the explanation: "YOU HAVE IDENTIFIED THESE AS OCCUPATIONS YOU WOULD NOT CHOOSE . . NOW I AM ASKING YOU TO BREAK UP THIS BIG GROUP INTO SMALLER GROUPS OF OCCUPATIONS THAT FOR SOME REASON GO TOGETHER IN YOUR MIND. PLACE THOSE YOU WOULD NOT CHOOSE FOR ONE REASON INTO ONE GROUP, THOSE YOU WOULD NOT CHOOSE FOR ANOTHER REASON INTO A SECOND GROUP AND SO ON. IN OTHER WORDS, GROUP THEM TOGETHER WHERE YOUR REASONS FOR NOT CHOOSING THE OCCUPATIONS WOULD BE THE SAME OR SIMILAR."

Suggest to S that he may use any strategy or reasoning he would like in order to make this sort.

The cards in the smaller groups are spread out so that all can be seen and S is asked: "WHAT'S INVOLVED WITH THESE? WHAT REASON DO YOU HAVE FOR NOT CHOOSING THIS GROUP?"

Remind S that the concern is not only to name the similarity of the grouped occupation, but also to give an indication of why he is not choosing them. For example, ask "WHAT IS IT ABOUT BEING A _____ THAT YOU WOULD NOT LIKE?

Allow the S to form new groups by adding: "COULD SOME OF THESE BE SEPARATE?"

You may wish to check to see that the explanation given fits the occupations in the group by asking "I'M NOT SURE HOW THIS ONE FITS IN . . or . . IT IS A MATTER OF _____?"

Setting out the "MIGHT CHOOSE" cards and repeat the above process with them.

Step III

S is asked: "ARE THERE ANY OCCUPATIONS YOU HAVE SERIOUSLY CONSIDERED THAT WERE NOT INCLUDED IN THE CARDS?"

If the answer is yes, S is asked to write them on a blank note card and arrange them in the "MIGHT CHOOSE" piles.

The same procedure could be used for S's parents' occupations.

Step IV

All the "MIGHT CHOOSE" cards are set before S again.

S is asked to select and to place in rank order the five occupations he most prefers. Ties in rank are allowed.

If S inquires whether to consider his lack of ability for some of the occupations, he is told to take all relevant factors into account.

S is asked why he ranked the five over the others and how he differentiates the first from the second, second from the third, and so forth.

Step V (Review)

S is shown the sheet used to record his comments about the occupations that he "MIGHT CHOOSE," and is asked: "IS THIS A SUMMARY OF WHAT YOU SAID? DO YOU WISH TO ADD OR CHANGE ANYTHING? DO THESE STATEMENTS REPRESENT YOUR WAY OF EVALUATING AN OCCUPATION?"

Finally, S may be asked "WHAT ARE YOUR REACTIONS TO THIS EXERCISE?"

What to Look for:

1. The reasons for sorting in groups can be considered as conscious statements about work values. Patterns of values work satisfactions may be noted. Patterns of work situations that are consiously avoided could be discussed.
2. The number of smaller piles may suggest how "loose" or "tight" is the S's category system. A large number of piles suggests that the student categorizes occupations under a large number of rubrics thus making the narrowing down of alternatives more difficult. A small number of piles suggests that S makes few distinctions among occupations and may need to consider more dimensions about occupations.
3. The balance between the number of "might choose" and "would not choose" may provide some clues as to the number of occupational alternatives the S still considers. Usually S's place a greater number of cards in the "Would not choose" stack.
4. Encourage S to use IOWAscript cards to read about occupations selected. Use "A Career Exploration Guide" (Grades 7-12) to explore occupations in depth.

A MODEL FOR CLASSROOM INTRODUCTION OF IOWAscript

Materials needed:

1 Microfiche Reader
1 Set of IOWAscript Card Decks
1 Sort Box
1 Sort Needle
1 Complete Set of Indexes
1 Laminated Copy of the Career Finder Index (or enough mimeographed copies to furnish one to each student) Both pages -- pink and blue
1 Water Base Magic Marker

Step I:

Hold up sample card and explain that it is a job brief on the microfilm insert, show where the job title is printed on the upper corner of the card.

Step II:

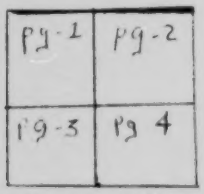
Explain the notching system that enables the students to sort by:

job cluster
salary
working conditions
training needs
related school subjects

Then demonstrate by sorting.

Step III:

Show (On chalkboard or use a projector to show on screen if projector will do this) the arrangement of the pages on the film.



So students will see the common format of all of the briefs. Also show the headings on each page:

Page #1	Job Title D.O.T. Cluster # The Job To Get the Job	Page #2	Earnings On-the-job
Page #3	Things to Think About Employment Opportunities	Page #4	Preparation & Training Where to Get More Information

Step IV:

Show the Area school decks, explain the color differences of the cards for different schools and the indexing system of the programs listed under the various card titles. (i.e. Trade & Industry, Welding, Tool & Die, Building Trades, etc.) Also go over the common heading on each training program (i.e. courses, salaries, high school subjects, etc.)

Step V:

Show the Apprenticeship deck and explain the same as Area schools in Step IV.

Step VI:

Show the Post High School deck and explain the two indexing systems (alphabetical and subject); also the page numbers listed on each card and the common format in the description of each school.

Step VII:

Demonstrate the use of the reader, and then let the students explore as a group while you supervise and answer questions.

CAREER EDUCATION

MATHEMATICAL PROBLEMS

1. How much is a plumber paid per day if he works eight hours? _____

2. How much does a _____ earn per week?_____

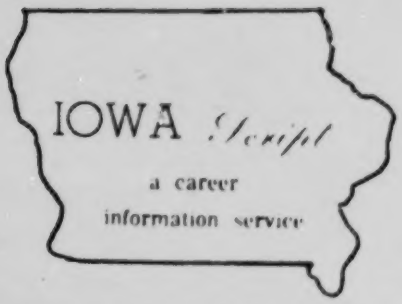
3. An apprentice bricklayer earns _____% of the union scale the first year? How much will he earn per hour?_____

4. How much will an apprentice _____ earn per hour the third year he is working?

5. How much more will the beginning _____ who graduates from Kirkwood Community College earn in a year than a beginning _____ graduate?

6. If you could earn $1.60 per hour, and would work 40 hours per week for 52 weeks instead of attending college to learn to be a welder --- what would be the actual cost of attending college?_____
How long would it take to make up the cost of training, considering the average starting wages for a Kirkwood Community College graduate from welding? Remember you can earn $1.60 per hour without training._____

EB/cr



AN INTRODUCTION TO CAREER AWARENESS

Grades 7-9

des moines area community college

2006 ANKENY BLVD., ANKENY, IOWA 50021
515 964 6611

an exemplary project in career education developed in cooperation with the iowa department of public instruction

Introduction

Many Junior High or Middle School students have never given serious thought to the world of work. As this group of students start exploration of this life longer aspect of living, basic career concepts will aid in developing positive attitudes toward occupational selection.

Much of this type of information is currently being stressed in elementary career education, but the 5th-12th grade students may or may not have been exposed to organized instruction. This Guide has been developed with the thought that instructors using it will first verify what instructors have been given at lower levels to avoid duplication.

A word of caution: although the unit is designed for use with IOWAscript materials, other occupational materials will be useful, but caution students to check publication date and place to determine if the information is applicable for local employment conditions.

Section #1 Name_____

FAMILY AND COMMUNITY

1. Family occupations: Can you list the jobs of each of these persons in your family? (List only those in your particular family)

   Father:_____

   Mother:_____

   Brothers:_____

   Sisters:_____

   Grandfathers:_____

   Grandmothers:_____

   Great Grandfathers:_____

   Great Grandmothers:_____

   Is there a pattern of types of occupations within your family?_____

   _____

2. How did your parents choose their work careers?_____

   _____

   _____

3. What types of training were involved in your parent's careers?

	Father	Mother
School	_____	_____
On the job training	_____	_____
Apprentice	_____	_____
Other	_____	_____

4. Can you list five industries in your community, which hire 20 or more persons?

   1. _____

   2. _____

Sec. #1 (Cont.)

3. _____

4. _____

5. _____

5. Have you visted one of these industries?

_____ YES _____ NO

6. Listed below are major job clusters in the world of work. Can you list an example of a person or business within each category?

Agri-Business & Natural Resources _____

Communications & Media _____

Construction _____

Consumer & Homemaking Occupations _____

Environment _____

Fine Arts & Humanities _____

Health Occupations _____

Hospitality & Recreation _____

Manufacturing _____

Marine Science _____

Marketing & Distribution _____

Office Occupations _____

Personal Service _____

Public Service _____

Transportation _____

7. What part-time jobs did your family have while attending school?

Father: _____

_____

Mother: _____

_____

Sec. #1 (Cont.)

Brother: _____

_____

Sister: _____

_____

Section #2 LOCATING CAREER INFORMATION

8. Where can career information be located in your school?

   1. _____

   2. _____

9. List three ways that you could gather information about an interesting career:

   1. _____

   2. _____

   3. _____

10. Have you ever investigated an interesting job? YES_____ NO_____

    If yes, what method did you use to locate your information? _____

    _____

    _____

11. Have you ever used a library card catalog to locate information about a career?

    YES_____ NO_____

12. Have you ever talked with a person about their job? YES_____ NO_____

    If yes, what was the job? _____

    _____

Section #3 YOU AS A PERSON

13. Have you ever thought of yourself as a person doing a job? YES___ NO___

    If so, what jobs? _____

    _____

Sec. #3 (Cont.)

14. All jobs relate to working with either data, people or things. If you were to choose today, which of these three would be most important to you in selecting an occupation? _____

15. What are special interests that you have?

1. _____
2. _____
3. _____
4. _____
5. _____

16. Hobbies?

1. _____
2. _____
3. _____
4. _____
5. _____

17. Aptitudes?

1. _____
2. _____
3. _____
4. _____
5. _____

18. Name the part-time jobs available to young people your age.

1. _____
2. _____
3. _____
4. _____
5. _____

Sec. #3 (Cont.)

19. What do these words mean?

    1. Occupation -

    2. Career -

    3. Aptitude -

    4. Interests -

    5. Apprentice -

    6. Vocation -

20. If you were to choose a job now, would you prefer to:

    _____ stay in home community _____ stay in Iowa

    _____ stay in this area _____ move to another part of the country

21. Have you ever thought of your school record in terms of later careers?

    _____ YES _____NO

    If so, how? _____

    _____

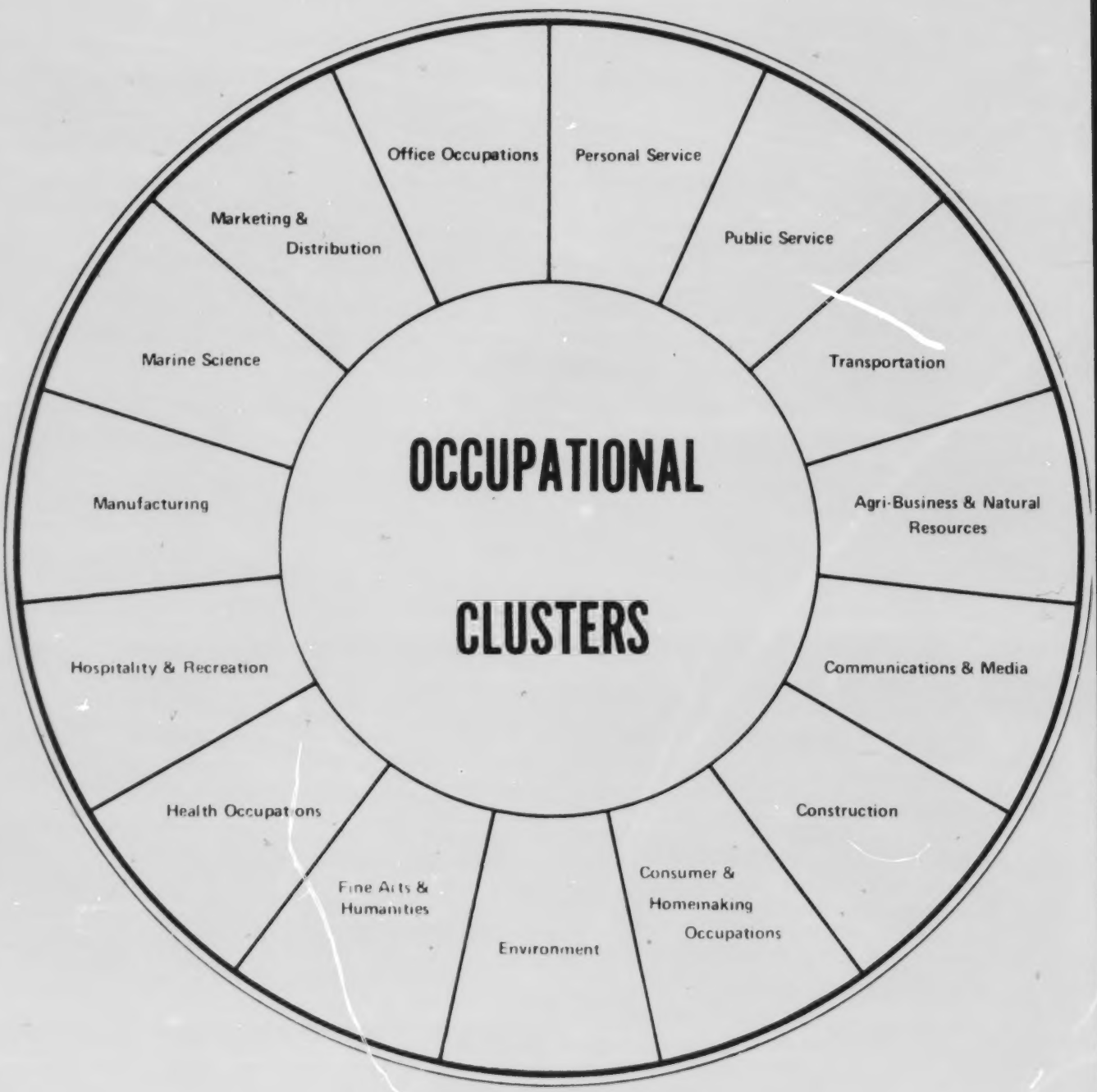
22. How can you review your past school record for possible clues to future educational choices?

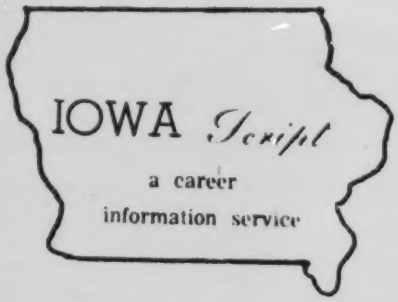
    _____

    _____

    _____

23. The Iowascript cards can be sorted in 46 different ways. If you are interested in matching some of your interests with specific occupations ask your teacher or counselor how to do this.


OCCUPATIONAL
CLUSTERS
Office Occupations
Personal Service
Public Service
Transportation
Agri-Business & Natural Resources
Communications & Media
Construction
Consumer & Homemaking Occupations
Environment
Fine Arts & Humanities
Health Occupations
Hospitality & Recreation
Manufacturing
Marine Science
Marketing & Distribution



AN APPROACH TO CAREER EDUCATION

Kindergarten through sixth level (grade)

des moines area community college

2006 ANKENY BLVD., ANKENY, IOWA 50021

515 - 964-0651

an exemplary project in career education developed in cooperation with the iowa department of public instruction

Introduction

This outline is presented as one approach to introducing career education into the elementary school. The emphasis on activities is in the language arts area. Many activities that can be used are given on the Iowascript Career Oriented Classroom Activities.

A word of caution: although the unit is designed for use with IOWAscript materials, other occupational materials will be useful, but caution students to check publication date and place to determine if the information is applicable for local employment conditions.

Our thanks to Miles Brewer of Keokuk Community Schools for much of the work that has been included in this outline.

KG. From the study of the family.

Episode 1. What is the best way to get something that we want? (now)

Behavioral Objective: The student understands that there are acceptable ways of getting something that he wants, by a willingness to explain how he got something that he likes, that wasn't a gift.

We all have unlimited needs and wants, and limited resources. People in a developed society get the things they need (food, clothing, shelter) by being gainfully employed.

Discussion topics: (see IOWAscript class activities)

A. I take it, even though it doesn't belong to me.
B. I ask politely if the person who has what I want will give it to me.
C. I buy what I want with money.
D. I trade something I have, for what I want.
E. I take what I want without buying or trading.
F. I plan a way to get what I want so I can have it later. (Save allowance, etc.)

G. I sometimes never can get what I want.
H. I do not need the thing I would like to have, so I decide I don't want it.
I. Dad or Mother get things he or she wants by working and planning.
J. My teacher gets the things she wants by planning and working.
K. My principal, the custodian, etc. get things by planning and working.
L. No one ever gets everything that he wants.
M. By planning and working, we can all get things we need.

Episode 2.

Behavioral Objective: Seventy-five percent of the students will show pride in their parent's occupation by a willingness to describe tasks being performed by their parents* on the job.

Discussion topics: (see IOWAscript class activities)

A. I know where my father (mother) is employed.
B. I know a task that he (she) performs on the job.
C. I could (could not) do this task myself now.
D. I can do this task when I am older (bigger, stronger.)
E. I would (would not) like to do this task when I am older.
G. I have heard of someone who does something I would like to do (Historical character, hero).
H. I can give good reasons for wanting to do this job.

* If no one is employed in the family or parents are absent, use friend, neighbor, school personnel, or item G. Care must be used not to create an embarrassing situation.

KG. Episode 2 (Continued)

1. There are many benefits to the family because father (mother, answer to F or G above) works and gets paid.

   1) We get things we need; food, clothing, shelter, recreation.
   2) we get some of our wants; vacation trips, toys, etc.

KG. From the study of the supermarket.

Episode 3.

Behavioral Objective: Each child can demonstrate in a drawing that he understands at least two tasks being performed in a supermarket (grocery store.) A video-tape is prepared or field trip taken which will show at least ten different tasks being performed in a supermarket.* By doing a good job, these people all help us to be happier and better fed at a lower cost to the family that buys needed items there.

1. The manager: hires people, orders things to sell, takes care of money, locks up at closing time.
2. Office clerk: types and keeps accounts.
3. Meat cutters: meat is received in whole (poultry 1/2), (hog, pork 1/4), (cattle, beef) carcass, and etc. must be cut and packaged at the store.
4. Baker: from flour, shortening, and sugar he prepares breads, cakes, pies, rolls, cookies, etc.
5. Packager: correctly packages baked goods for sale.
6. Check-out: makes the correct charge for things bought, identifies the department in the store that sold it, counts money, and makes change.
7. Produce manager: prepares fresh fruits and vegetables for sale, packages and refrigerates them.
8. Dairy products: may or may not be a store employee. Displays milk and milk products for sale. May also be responsible for eggs. Must keep careful record of each package to insure that everything sold is fresh and unspoiled.
9. Carry-out: correctly sacks articles bought and places them in cars to be taken home.
10. Shelf-stockers: carry things from the stock room, open boxes, put prices on each package to display for sale.
11. Truck driver: may or may not be a store employee. Brings everything to the store that is for sale. May deliver a family order that has been made by phone or for someone that doesn't have a car.
12. Custodian: keeps floors clean and dry, keeps windows clean. Keeps empty boxes and bottles where they belong.

* These 10 tasks may or may not be performed by 10 different people depending on the size of the store.

Level 1. From the study of the farm.

Episode 1.

Behavioral Objective: There are many jobs, involving many work skills, being done on a farm. A student demonstrates an understanding of this by an ability to describe orally, or by making a picture, showing three of these.

Discussion topics: (see IOWAscript class activities)

1. A farmer operates tractors, which are much like trucks to drive. (Large, heavy, powerful; slower than automobiles.)
2. A farmer may dispose of wastes. (garbage disposal)
3. A farmer may do a plumber's job. (fix a well pipe)
4. A farmer may do an electrician's job. (fix wiring in a barn, hog, or chicken house)
5. A farmer may do a carpenter's job. (Build a hog or chicken house, fix a door, roof, etc.)
6. A farmer may need to know how to care for animals, food (cook or dietition) shelter (motel, hotel) clean water (water purification plant employee) when they are sick (doctor, pharmacist, veterinarian, dentist.)
7. A farmer may need to know some skills of a draftsman (draws maps and plans for crop rotation, planting different crops in different fields at different times.)
8. A farmer may do the job of a mechanic. (repair broken machinery by welding, replacing broken parts with new parts, repair tires or remove for repair, repair engines, build machines to do special jobs.)
9. A farmer may need to know chemistry. (He uses weed (herbicides) and insect killers (insecticides) and may test soil to know what fertilizers to use.)
10. A farmer may need to be a lumberjack. (cut trees for fence building and repair, framing lumber for buildings.)
11. A farmer may need to be a marketing expert. (he must sell the things he has grown to stay in business.)
12. A farmer may need to be a bookkeeper and accountant (know math to keep track of money costs and income from sales. Must pay taxes.)

Level 1. From a Health Study.

Episode 2.

Bring understanding to the concept, we must make choices between needs and wants.

Behavioral Objective: Each child will be able to give three examples of needs and three examples of wants, in oral conversation or in a drawing, or in combination.

Discussion topics: (see IOWAscript class activities)

Level 1. Episode 2 (Continued)

A. To be healthy and happy we really need very few things.

1. Food, balanced diet, not fancy food (stew instead of steak) (hock and beans instead of ham, etc.)
2. We need clothing according to activity and weather conditions. (health reasons)
3. We need shelter that is clean, warm, and dry. (health reasons)
4. We need recreation, some ways to have fun, acceptable ways to use our leisure time, hobbies, music, art, physical activities. (Mental and physical.)

B. We have unlimited wants, or wants limited only by immediate economic conditions. (Use catalogues to show our many wants.)

1. We get food that we like but don't need, and which may harm our health (candy, pop, fancy foods.)

   a. potato chips
   b. snack crackers
   c. ice cream
   d. pastries
   e. desserts

   Expensive foods:

   a. steak
   b. ham
   c. fresh fruits and vegetables out of season

2. We buy clothing that is stylish, nice, pretty, etc. rather than appropriate and serviceable.

   a. How many costumes do we need?

      1. Play clothes
      2. Dress-up clothes
      3. Pairs of shoes
      4. Winter clothes
      5. Summer clothes
      6. Outdoor clothes
      7. Sleepware, etc.

3. Shelter is rented or bought because of appearance and location rather than roominess and serviceability. (can our home be kept warm, neat and clean easily with each family member doing his part?)

4. We need to have fun, play, and use our leisure time wisely. Do we need to buy so many things to have fun?

   a. How many dolls do we need?
   b. How many trucks do we need?
   c. Can we make toys out of scraps and old toys or must we buy new ones already made?
   d. Can we make up games or must we buy them already made?
   e. Must we always go somewhere away from home to have fun?
   f. Must we wait for someone to visit us to have fun?

5. We learned last year that we get the things we need and want with money. We get money by someone in the family working or by getting a check in the mail. Do we do our part to help the family spend this money on things we need rather than just things we want?

6. Another way to help the family use its income wisely is to take good care of the things we have.

   a. We take good care of our health and prevent medical and dental bills by:

      1. Eating the right foods.
      2. Brushing our teeth correctly and regularly.
      3. Getting enough rest and sleep.
      4. Getting enough exercise.
      5. Taking care of a cut, scratch, or burn to prevent infection.
      6. Keeping our body clean.
      7. Having regular dental and physical check-ups.
      8. Being careful at play.

         a. climbing
         b. in traffic
         c. riding

            etc.

   b. We take care of our clothes.

      1. Keep clean or change when dirty.
      2. Keep clean clothes neatly in drawers or closets.
      3. Place soiled clothing in a special place.

   c. We do our part in taking care of our home.

      1. Help keep it clean.
      2. Help keep it neat inside and out.

   d. We take care of our toys and the things we use while having fun.

      1. Play courteously and safely.
      2. Store in a certain place when we are not using them.

   e. We take good care of the things we need at school.

      1. School clothes.
      2. Rental books, so we don't pay fines.
      3. Use paper and pencils wisely.

Level 2. From the study of community helpers.

Episode 1.

We cannot meet our needs for happiness without the help of others.

Behavioral Objective: Each student can write a sentence describing an instance of interdependence.

Discussion topics: (see IOWAscript class activities)

1. We depend upon many workers for our health and safety.
    a. Policemen, safety patrol, sheriff, highway patrol, armed services.
    b. Firefighters
    c. Inspectors, electrical, plumbing, water, food, etc.
2. We depend upon many workers for our food.
    a. Farmer
        1. stock (meat)
        2. vegetable
        3. fruit
        4. dairy
        5. grain
    b. Transportation
        1. truck
        2. rail
        3. air
        4. ship
    c. Grocery store employees (at least 12 jobs.)

        See KG supermarket activity
    d. Packing house worker
    e. Storing food
        1. Stockyards
        2. Refrigerator
        3. Warehouse
        4. Packaging
        5. Grain elevator
    f. Food processor
        1. Grain miller
        2. Baker
        3. Butcher

4. Boxed food processor
5. Canned food processor
6. Paper, wood, plastics and can packaging material producers
7. Milk product's processor
8. Poultry product's processor
9. Frozen food processor

3. We depend upon others for our shelter.

a. Real estate agent or landlord

b. Builders and repairers

1. Carpenter, painter, roofer
2. Mason
3. Electrician
4. Plumber, Heating, air conditioning
5. Excavator
6. Landscaper
7. Interior decorators

a. painter
b. paper hanger
c. finish carpenter

4. We depend upon others who make our life more enjoyable.

A. Mother, homemaker

1. Cook
2. Laundress
3. House cleaner
4. Nurse
5. Trouble shooter

a. If a fuse blows and the lights go out
b. If there is a plumbing emergency
c. If there is a gas leak
d. If there is a leaky roof

B. Father

1. Does some job well enough that someone pays him for it.
2. Takes care of car
3. Takes care of yard
4. Fixes things

Level 2. Episode 1 (Continued)

C. Doctor
D. Dentist
E. Postal Worker
F. Telephone Worker
G. Minister, religious educator
H. School personnel

1. Principal
2. Teacher
3. Special area teacher or supervisor
4. Custodian
5. Cook
6. Bus Driver
7. Secretary
8. Nurse

I. Leisure time activity supervisors

1. Cub and Scout Leaders
2. Y Leaders
3. Club Leaders
4. Little League Coaches
5. Private Music or Dance Teachers

Level 2. From the study of community helpers.

Episode 2.

Adults choose to do the job they do for many different reasons.

Behavioral Objective: Each student can demonstrate a knowledge of vocational preference rational by writing a short paragraph or participation in a project which shows at least two factors involved.

Discussion topics: (see IOWAscript class activities)

1. Father (Mother, historical character) does the job he is now doing because: (Each student may ask working parents questions based on information that follows. Students from non-working homes may do research with the teacher's help, to learn about the jobs of historical characters. An objective for this latter group is to show a correlation between planning, work, and success and happiness (the U.S. Presidents could be an example)

A. Their parents, some relative or good friend did this job.

1. Work in the same place
2. Family business

B. They wanted to do something that helps people.

C. Because of training demands.

1. They wanted to make money now (without going to school)

(a) Could they have gotten a better job with more pay if they had stayed in school?

2. They decided to stay in school longer and get a job at better pay and with better working conditions.

D. They liked the working conditions

1. They wanted to work outside
2. They wanted to work inside
3. They like to travel
4. They like to stay in one place
5. They like a variety of activity
6. They like to do one thing

E. They are well suited to the job physically

F. They like this community and want their family to live here

2. To be happy, we must choose our work for good reasons. We are happiest when we are doing things that we do well. There are thousands (over 45,000 in 1970) of jobs for us to choose from: The 15 clusters or the world of work are: (films are available) List 15 clusters. Jobs from each cluster can be identified from the IOWAscript card deck.

3. Job roles change and are changing. There aren't any jobs just for boys. There aren't any jobs just for girls.

4. From all of the thousands of jobs being done today, no matter what job we do, we can do it in such a way that we are proud of it. Our job today is going to school.

We can all:

1. Be here every day
2. Be on time
3. Use our tools as they were designed

a. pencils
b. paper
c. books
d. crayons
e. teacher

4. Put out a good product (each assignment)

Level 2. Episode 2 (Continued)

5. Get good pay (all the learnings and information, free of charge, that have taken years of research and thousands of dollars to discover.

Level 3. From the study of community history.

Episode 1.

A survey of the professions, trades, and tasks of the early settlers of our community, and how they learned to perform them. (Formal education, apprenticeship, on the job training.)

Behavioral Objective: Each student can estimate the education and training needed to perform the tasks of a pioneer society and can demonstrate this by completing an assignment in writing, which shows this in one historical character.

Discussion topics: (see IOWAscript class activities)

Select a local pioneer person, perhaps one for whom the community was named, so who is popular in county history or who achieved national recognition. If none are available create a fictitious person who may have lived in the community.

Level 3. From the study of community history.

Episode 2.

Taxes are collected by governments for the purpose of paying for taxes which are more efficiently done for a large group. Pioneer governments collected few taxes and gave almost no services.

Behavioral Objective: Each student can identify and describe in writing a service being paid for with tax money, which they or their family could not easily provide for themselves.

Discussion topics:

1. Road building

   a. When were the first roads built.
   b. Were bridges public or private.
   c. Roads today are built and maintained by city, county, and state tax money.

2. Water, sewage

   a. Early times everyone furnished his own facilities.
   b. Today cities using tax money provide this by building the facilities, hiring people to create them.

      1. Water purification, pumping
      2. Primary sewage treatment
      3. Garbage disposal

Level 3. Episode 2. (Continued)

3. Public safety

There was no one to provide immediate help before a city government was established. Today there is:

a. Police, fire
b. Sheriff
c. Highway patrol
d. F.B.I.
e. Armed Services

4. Schools

a. There was no guarantee that a school was available before the city government was established.
b. Taxes provide public elementary, secondary schools
c. Taxes provide colleges

5. Recreation

There were no regular facilities for this before a city government was established.

Today there are:

a. Parks
b. Pools
c. Rinks

6. Library

Books could only be bought or borrowed from individuals before the city established a public library.

Level 3. Based on pioneer study.

Episode 3

Workers are paid for their services and producers are paid for their products with money (cash or check). Money may be exchanged for the goods and services which an individual or family may need or want, or it may be saved for use at a later time.

Behavioral Objective: Each student can give evidence of an understanding of some advantages which a monitary system holds over a barter system by, writing a sentence, or a paragraph which shows an evaluative comparison.

Discussion topics:

1. Many business transactions were carried out by the barter system in pioneer days.

   a. Work was exchanged for goods

      1. Work on roads to pay taxes
      2. Work for a farmer to buy a horse
      3. Do repair and improvement on property to pay the rent

   b. Trade farm produce for goods or services not produced on the farm.

      1. Trade eggs for salt or sugar
      2. Trade hogs for a plow
      3. Trade a cow for a carpenter in exchange for his building a barn

2. There are many problems with a barter system.

   a. How many eggs is five pounds of salt worth?
   b. How many hogs is a plow worth?
   c. How many days labor is a cow worth?

3. The money system solves our problems of exchange best.

   a. How much money are eggs worth? How much is salt worth? Pay any difference in money.

   b. How much money is a hog worth? How much is a plow worth? Pay differences in money.
   c. How much is a cow worth? How much is a carpenter paid per day? Pay differences in money.

4. You may still use a barter system in a limited way.

   a. Dad probably "trades" cars
   b. You may "trade in" pop bottles for a candy bar.
   c. Mother may "trade in" an old appliance for a new one.

5. With a money system we can buy things that we want or need even though we may not have the money at the time, by renting (borrowing) money.

a. Someone in your family may rent money to buy a house.
b. Someone in your family may rent money to buy a car.
c. You may rent money to buy a bicycle.
d. You can rent money only if you can guarantee that you can pay it back. (You must have an income.)
e. Banks, savings and loan companies, help us rent money that we need.

6. Banks, savings and loan companies help us save extra money which we might have, for use at a later date.

a. We may use the bank's checking system.
b. We may use the bank's or savings and loan companies money keeping system.

1. When you save money in this system it is rented to someone else by the bank or savings and loan.
2. The bank or savings and loan pays your rent when they use the money you placed in their keeping.
3. When you need your money you can get it, plus the rent paid while someone else used it.

Level 4. <u>From the regional study of the far north or the tropics</u>.

Episode 1.

Members of a primitive society are much more independent that the members of a highly developed technical society. The more technical our society becomes, the more interdependent we become, as we seek to meet the basic needs of life, food, clothing, shelter, recreation.

Behavioral Objective: Each student can demonstrate an understanding of the interdependence of a technical society by writing a paragraph which gives examples of interdependence.

Discussion topics: (see IOWAscript class activities)

1. The primitive world of work is based on the needs of a family unit.

a. Hunting

1. Makes all hunting tools
2. Becomes dependent when he trades for steel tools.

b. Farming

1. Makes all farming tools
2. Uses his own animals for muscle power
3. Becomes dependent when he trades for steel implements for better livestock.

c. Shelter

1. Builds a shelter using handmade tools and native materials

   a. Wood
   b. Thatch
   c. Ice or snow
   d. Animal skins
   e. Clay (for plaster and bricks)
   f. Sod

2. Becomes dependent when he trades for:

   a. Glass
   b. Canvas
   c. Nails
   d. Steel tools, hammer, saw, trowel

d. Clothing

1. Spun, woven, or sewed from native plant materials
2. Spun, woven, or sewed from native animal materials
3. Shoes from native plant or animal materials
4. Becomes dependent when he trades for cloth or shoes

e. Homemaking tools

1. Cooking utensils made of native materials
2. Beds, sleeping mats, etc. made of materials at hand
3. Fireplace or oven made of native materials
4. Storage containers made of native materials
5. Water supply and sewage disposal; use what nature provides.
6. Becomes dependent when he trades for things not made by a family member or provided by nature.

f. Recreation; provided by the family

1. Boys play games which will provide their food providing skills
2. Girls play games which will improve their homemaking skills

Level 4. Episode 1 (Continued)

2. An advanced society member depends on many other people to help him provide his needs and wants. (See study, Level 2, Episodes 1 and 2)

   A. We depend on others to help us provide our food.
   B. We depend on others to help us provide our shelter.
   C. We depend on others to help us provide our clothing.
   D. We depend on others to help us provide recreation.

3. How many jobs can you identify as being connected with producing your desk?

4. Why does the President of the United States need so many helpers?

Level 4. From the regional study of the far north or the tropics.

Episode 2.

As an activity to follow Episode 1, organize the class into a modified corporate structure and produce a saleable product.

1. Choose a product to produce and market (a shoe scraper made from wood scraps, pop bottle caps and nails, or any other product of similar nature.)

2. Choose a corporate name.

3. Elect (choose) a president.

4. Choose a vice-president in charge of procurement.

   a. Provides raw materials (scrap lumber, bottle caps, nails, paint, etc.)
   b. Provides tools. (Saws, hammers, boards, paint brushes)
   c. Supervises people in receiving department.
   d. Trains, directs and supervises any helpers needed and chosen by him.

5. Choose a vice-president in charge of production.

   a. Chooses and supervises all production workers.
   b. Trains and supervises workers for jobs of assembly. (Saws scrap lumber into correct shape and size; nails the bottle caps to the boards; chooses the right kind and size of nails; supervises painting.)

c. Trains and supervises a production foreman who will help supervise each production worker.
d. Inspects and approves each unit produced or appoints and trains inspectors.

6. Choose a vice-president in charge of sales.

a. With the president, establishes prices
b. Chooses and trains or directs all packaging and shipping and sales staff
c. Trains and supervises wrapping, boxes, etc. of the product
d. Discovers, with the help of the staff, a market for the product.
e. Chooses and trains all supervisory people in this department (inspectors, foremen, etc.)
f. Accounts to the president for all income (may choose clerks, treasurer, etc. and train them to do the tasks assigned.)

Level 4. From the regional study of the far north or the tropics.

Episode 3.

We are all consumers and producers of goods and services. In the world of work we must make a contribution if we expect to get something in return. (pay)

Behavioral Objective: Each student can demonstrate an understanding of producing or consuming goods and services by an ability to write personal instances of being a participant in both phases of the process.

Discussion topics:

1. In a primitive society a family produces what it needs and consumes what it produces.

A. Transportation problems are simple.
B. Your own life may depend upon how well you make a spear, a bow, etc., so you make it as well as you can.
C. You may wear the clothing yourself made from the cloth you are wearing, so you weave it well.
D. You are going to sleep under the roof you are making, so you make sure it doesn't leak.

2. In a technical (advanced, highly developed) society we employ division of labor techniques in the production of goods and services.

A. How should an auto worker build a car, he will never drive it?
B. How should a farmer care for the milk, he will never drink it?
C. What should a repairman do to fix something broken, it isn't his, he will never use it?
D. How should you mow your neighbor's yard, it isn't yours?
E. How would you carry out a task around the house if you wanted an allowance or wanted your allowance increased?

3. Pride in workmanship, performing a service well, is rewarded in the world of work.

A. What things do you do to keep and expand a paper route?
B. What things do you do to expand a lawn mowing business?
C. What kind of job do you do if you want the coach to pick you to be on the team?
D. What kind of job do you do if you want to be chosen to be in the program? (choir, band, etc.)

4. Keeping a job, promotions, and advancement depend upon quality of workmanship and on the job performance.

A. You only keep a paper route if you can prove by your performance that you can do a good job.
B. You are asked to mow someone's yard two or more times, only if you do a good job.
C. You only remain on the team if you can prove to the coach that you are good for the team.
D. You only are chosen to be in the program (band, choir, etc.) if you prove to someone that you can do the job.
E. Telephone repairmen keep their jobs if the telephone works after they say it is repaired.
F. Production workers keep their job only if the things they help make can be sold after it is made.
G. Promotions come only to workers who have proven that they can do a good job.

H. If we work for someone else, we must produce something that can be sold.

1. good workmanship
2. good service

5. Your leisure time activities can help you develop habits which will help you in the world of work.

Level 4. Episode 3 (Continued)

A. What kind of boys club, scouts, or girls club member are you?

1. Are you on time?
2. Do you attend regularly?
3. Do you try to make advancement?
4. Would your club leader hire you to do a job for pay?

B. What kind of model do you build?

1. Do you follow the directions exactly?
2. Are you proud of the job you do?
3. Do you clean up your mess?
4. Would someone pay you to put a model together for them?

C. Do you make things for your own use or for others?

1. Saw
2. Knit
3. Build things from wood
4. Repair things

D. What kind of job do you do with responsibilities at home?

1. Make the bed
2. Yard work
3. Cooking
4. Dishes
5. Do you really earn an allowance?

6. When can we say we have nothing to do?

A. There is always something that needs to be done at home.

1. Inside the house, basement
2. In the yard, garage

B. There is always someone who can use our help if we aren't always interested in pay.

1. Clean up the school yard
2. Clean up the alley
3. Clean up, trim, rake to make our own yard look nice
4. Help an older neighbor keep his yard and alley neat

Level 5. From the study of Abraham Lincoln.

Level 5. Episode 1. (Continued)

Planning is an important factor in anything that we do well. Pre-vocational planning is important also. (See Level 2, Episode 2.)

Behavioral Objective: Each student can identify specific advantages to planning before acting, and can demonstrate this knowledge by an ability to describe in writing two benefits derived from such planning.

Discussion topics: (see IOWAscript class activities)

1. What jobs did Lincoln hold in his lifetime?

   A. Farm work (see Level 1, Episode 1)
   B. Woodsman
   C. Peddler
   D. Flat boatman
   E. Store keeper and miller
   F. Postmaster
   G. Surveyer
   H. Lawyer
   I. Representative

      1. To the Illinois State Assembly
      2. To the United States Congress

   J. President of the United States

2. How did he get the training necessary to do these jobs? Did he choose these jobs for good reasons?

   A. Farm

      1. How did he train?
      2. Why did he choose farm work?

   B. Woodsman

      1. How did he train?
      2. Why did he become a woodsman?

   C. Peddler

      1. How did he train?
      2. Why did he choose this job?

   D. Flat boatman

      1. How did he train?
      2. Why did he choose this job?

E. Store keeper and miller

1. How did he train?
2. Why did he choose this job?

F. Postmaster

1. How did he train?
2. Why did he choose this job?

G. Surveyer

1. How did he train?
2. Why did he choose this job?

H. Lawyer

1. How did he train?
2. Why did he choose this job?

I. Representative (State and National level)

1. How did he train?
2. Why did he choose this job?

J. President of the United States

1. How did he train?
2. Why did he choose this job?
3. What things can you plan?

   A. For the present (right now)
   B. For the future

4. What advantages have you discovered about pre-vocational planning. (See Level 2, Episode 2.)

Level 5. From the study of our home state and community.

Episode 2.

As our society becomes more technical, the tasks are more specialized. Therefore, in the world of work we are required to specialize. It is necessary that we become proficient at performing some task. Wise choices are based on preferences (things we like) and abilities.

Level 5. Episode 2. (Continued)

Behavioral Objective: Each student understands that we must constantly make choices. He has an understanding of this concept in the world of work and can demonstrate this by an ability to write four reasons for his choice in a task-oriented, money making project of his own.

Discussion topics:

1. What job opportunities are available in our community? (See Level 2, Episode 2.)

2. Adults should have good reasons for deciding to do the work they do.

   A. They do it because they like it.

      1. They enjoy it, it's fun for them
      2. They like the pay

         a. It provides the income needed to provide their needs
         b. It provides the income needed to provide their wants

   B. They do it because of their ability.

      1. Physical size and strength
      2. Educational level of achievement
      3. Dexterity, speed (A space equipment assembly technician was hired because of his manual dexterity. He achieved this by putting together hundred of models as a boy. He always put them together perfectly.)
      4. An ability to meet and get along with people
      5. Salesmanship

3. What factors limit your job opportunities today? (right now)

   A. Law
   B. Age
   C. Size, strength
   D. Experience
   E. Educational achievement level
   F. Personal likes and dislikes

4. What job opportunities are open to you?

   A. Lawn and garden work
   B. Sewing, knitting, other hand work (made for sale)
   C. Building and selling things made from wood.

1. Bird houses
2. Bird feeders, etc.

D. Constructing and selling models

E. Shining shoes for pay

F. Clean up jobs.

1. Garage, basement, attic, closets
2. Windows

G. Running errands

H. Vacation pet care service

I. Small animals raising and marketing

1. Rabbits

2. Mice

3. Hamsters

4. Gerbils

5. Guinea pigs

J. Selling garden seeds

K. Raising and selling garden produce

Level 5. Episode 2 (Continued)

*5. What things can you do right now that will help you get better jobs when you are older. (See Level 2, Episode 2)

A. Develop good work habits

1. On time
2. Good attendance
3. Good workmenship (if we want someone to pick up, we must be the best at that job. The coach picks you only when he is convinced that you are the best one for that position at the time. He moves you when he is convinced you are not the best one for that position at the time. The boss on a job for pay works the same way.

B. Develop an ability to get along with people, and to work cooperatively with them.

Level 6. From the study of medieval Europe.

Episode 1.

Many jobs are being done now that will be phased out in our lifetime, because of changes in technology, needs, and wants of people. There will be jobs available during our lifetime which are not even developed yet. The demands of the world of work constantly change.

Behavioral Objective: Each student understands that jobs being done now may not always be available and new jobs are constantly being created. He also understands the concept of retraining in the world of work and can demonstrate a knowledge of those concepts by an ability to give three examples in writing.

Discussion topics: (see IOWAscript class activities)

1. The world of work in Europe during the middle-ages is very different from the world of work in our 20th Century industrialized society. (See Level 2, Episode 2)

A. Power sources

1. Muscle power

a. Man
b. Animals

* This concept may be developed as Level 5. Episode 3.

2. Wind power

a. Sailing boats and ships
b. Windmills

1. Grind grain
2. Saw lumber
3. Pump water

3. Water power

a. Rafting downstream
b. Sawing lumber
c. Grinding grain
d. Rafts (barges) pulled by animals

B. Professions

1. The clergy was the only true profession
2. Medicine wasn't scientified

a. Magic
b. Superstition
c. Barber was surgeon because he had tools
d. No understanding of sanitation

3. Law

a. Advisor to rulers
b. Based on tradition and opinion (not really law)
c. Trial by ordeal
d. Might makes right

4. Education

a. A function of the church

1. Priest first
2. Teacher secondary position

b. Early universities established by and for churchmen
c. Clerks and accountants trained by the church.

C. Dominance of agriculture

1. Most workers were meeting needs and wants on a small farm or as a member of a managerial community.

   a. Food
   b. Cloth
   c. Leather
   d. Building materials

      1. Wood
      2. Store

   e. Castle work force supported from rents (taxes of farm produce or labor)

      1. Men at arms
      2. Armourer
      3. Cooks and serving people
      4. Falconer
      5. Xennel keeper
      6. Stable keeper
      7. Master builders

         a. Woodworkers
         b. Stone workers

      8. Miller
      9. Potter

D. Business, Commerce trade, finance

   1. Businesses were small and local

      a. Transportation not so necessary so it remained under-developed. (The system of the dynastic Egyptians, Greeks, Romans, etc. would be equal to 13th Century Europe's needs.)
      b. Raw materials were produced locally (except metals, jewels, glass, spices, and exotic cloth.)
      c. Products were marketed locally.
      d. Most manufactured products were produced in the home or on the manor. (City craftsmen had home and shop together.)
      e. There was no real guarantee of personal safety when traveling off the manor or outside the town.

f. Commerce was carried on by peddlers and merchants who carried their goods with them in a cart or wagon. (Small one-man operations)
g. There was almost no international trade.
h. There was no established uniform monetary system.
i. Borrowing capital was done by arrangement between individuals who needed money and those who had accumulated wealth. (Usually the church.)
j. Everyone was individually responsible for the safe keeping of his preservable wealth. (Money, precious metals, jewels)

1. Treasure room
2. Safe hiding place

E. Entertainment and leisure time activities. (See Level 4, Episode 1, part 5 and 6)

1. Common people had almost no leisure time.

a. Church holidays
b. Annual fair

2. Landed aristocracy

a. Hunting, hawking
b. Tournaments and jousting
c. Storytelling
d. Music

F. Government and governmental services

1. The main function of government in the middle ages was to guarantee personal security.

a. National security was guaranteed by the King.
b. Local security was guaranteed by the sheriff or the Lord of the manor.
c. Lord of the manor guaranteed a home, use of the land, and a place of safety during local warfare in exchange for rent. (little difference here between rents and taxes)

2. Built and maintained a few roads, bridges, ferrys, etc.

3. The jobs available to a worker in the community are constantly changing, therefore, learning, re-training, and updating skills are lifelong responsibilities of a successful worker.

   A. Most Iowa communities have had at least one small industry that has been closed due to oblescence of product, process, or market. A research to discover the history of this, reasons for closing and what happened to the workers will form an excellent basis for this section.

4. We must look to the future as we prepare to enter the world of work, and understand that there are no lifetime occupations. All jobs,(professions) require re-training, some jobs will be phased out and others not available due to technological and scientific advancement.

   A. A mastery of basic learning and communications skills will enable us to train for any job.

      1. Listening

         a. Receiving information
         b. Following directions

      2. Speaking

         a. Reporting concisely
         b. Informing others
         c. Giving directions

      3. Reading

         a. Getting information
         b. Evaluating reports
         c. Correctly interpreting directions

      4. Writing

         a. Keeping notes
         b. Recording information
         c. Writing reports

      5. Basic knowledge of our number system

a. Base ten numeration, four fundamental operations, common fractions, decimals, and per cents.

1. Record information
2. Report accurately
3. Compute

b. Measures

1. Linear, area volume
2. Liquid
3. Time
4. Dry

B. Our first vocational choice may lead us into a related field. (Job clusters)

1. One job cluster example is health service.

a. Physicians and surgeons
b. Nurses - men and women

1. Registered nurse; R.N.
2. Practical nurse; L.P.N.
3. Nurse's aide
4. Orderly

c. Laboratory technician
d. Physical therapist
e. Dietician
f. X-Ray technician
g. Surgical technician
h. Anesthetist
i. Medical record technician (librarian)
j. X-Ray therapist
k. Pharmacist
l. Pharmacist technician
m. Administrators

C. No matter what job cluster we choose to enter in the world of work, there are entry jobs with less pay and less desirable working conditions, and advancement comes only with performance. We may change jobs within a cluster by re-training.

Level 6. Episode 1 (Continued)

1. In the plant

   a. Production worker
   b. Foreman
   c. Department manager (general foreman)
   d. Production manager
   e. Plant manager
   f. Vice-president
   g. President

2. In the building trades

   a. Helper or apprentice
   b. Journeyman
   c. Master craftsman
   d. Supervisor or foreman
   e. Project superintendent
   f. Contractor
   g. Engineer
   h. Draftsman
   i. Surveyor

Level 6. From the study of Modern Nations Develop in Western Europe.

Episode 2.

A successful community makes the best use of its resources, people, and their abilities, natural resources, and capital.

Behavioral Objective: Each student can recognize the factors involved in producing a successful community and can identify reasons for success and failure of some communities and can demonstrate their knowledge by writing a meaningful explanatory paragraph.

Discussion topics:

1. Communities, towns, cities, develop for very definite reasons.

   A. Harbors
   B. River obstructions

      1. Islands
      2. Falls
      3. Rapids
      4. Tributary mouth

   C. Railroads
   D. Mineral deposits
   E. Military fort sites

2. Why did the local community become established?

   A. Natural features

B. What people settled the area
C. What were the first businesses
D. Service businesses were developed to accomodate people

1. Hotels, restaurants
2. Livery and dray services

E. Population trends from founding to present time

3. People working together, each performing his specialized task, make a community (interdependent.) (See Level 3, Episode 1)

4. Communities greatest natural resources are the people and the natural resources.

5. A community's ability to accumulate or attract capital is essential to its progress.

A. Capital will accumulate if a person, family, community, or institution can meet its needs, some of its wants, and have some asset left to save.

B. Savings institutions help us accumulate capital.

1. Banks
2. Savings and Loan Associations
3. Insurance investments

C. Capital enables a community member to invest in machines which will mean jobs, increased production, and a higher standard of living.

1. Every job in the United States has about $30,000 invested in it. (Land, building, and machines.)
2. Every worker must produce enough to bring a fair return on this investment.
3. An example of the benefits of capital to the individual worker and to the community.

Setting: A rural community, 100 miles from the nearest town. This community

needs fuel oil for heat, light, and cooking.

One worker carries two five-gallon cans on his shoulders. He can make one trip each week walking.

The fuel oil costs 25¢ per gallon in the town. The worker sells the oil in his village for 50¢ per gallon. His income then, is $2.50 per week. His investment is zero, he found the two five gallon metal cans at a military dump.

If he had $5,000 to invest, or could borrow $5,000, he could buy a 5,000 gallon capacity tank truck.

He could make one trip every day, bringing 25,000 gallons of fuel to the community each week.

He could cut the price from 50¢ to 30¢ per gallon. His weekly income still raises to $1,250 per week. If his truck can operate at 15¢ per mile, subtract $150 and he clears $1,100 per week.

He can easily pay off his loan if he borrowed to buy his truck and still greatly raise his standard of living.

JOB HUNTING IS A SALES CAMPAIGN

Getting the right job requires a sales campaign. You are marketing your services. Sales managers have learned through long experience that certain definite steps are involved in marketing a product.

1. You must know the product you're trying to sell - in this instance your qualifications.

2. You must become familiar with the market - in this case possible employers who may need your service.

3. You must locate employers who have vacancies for people with your qualifications.

4. You must sell yourself to the employer as the applicant best qualified for the job.

5. You must tactfully follow up the employment interview until either you have the job or you know that you have not been selected for it.

6. You must recognize the percentages and not expect to get every position for which you apply. If you make enough contacts, sooner or later you will make the sale and get the job you want.

7. After obtaining the job, if it is a permanent one and in keeping with your career plans, think in terms of promotions. Prepare yourself for greater responsibilities and more important duites by doing more than the job requires.

WAYS TO LOOK FOR A JOB

1. *Tips from friends and relatives*

   Tips from friends and relatives open more doors to more jobs than any other single means. Approximately half of all jobs are secured in this manner. So let it be known that you are looking for employment.

2. *Personal application*

   "Cold canvassing" involves plenty of pavement pounding, driving or bus riding, doorbell ringing, and reception room waiting. "Cold canvassing" is the second best job-hunting method. Do not start out cold. Make some plans. Use directories (such as the telephone directory) to look up possible sources of employment before starting out. By canvassing all possible sources of employment within a district or section, much time and walking can be eliminated.

3. *Former employers*

   Former favorable work records provide good recommendations. Former employers, because of their contacts within the business circles, often learn of employment opportunities. These employers are usually willing to recommend good former employees.

4. *Employment Agencies*

   Employment may be secured through public and private employment agencies. Each state maintains employment offices in a number of cities and towns within the state. Employers often list employment opportunities with these offices. Private employment agencies are located in the larger cities. Often a fee must be paid for employment secured through private employment agencies.

5. *Newspaper help-wanted or situation-wanted ad-*

   Many employment opportunities are listed daily in the help-wanted columns of local newspapers or trade magazines. Many such ads require a letter of application and often a resume. Situation-wanted ads must be placed by the individual seeking employment. Situation-wanted ads are not a good method for a beginner.

6. *Unions*

   Some labor unions maintain hiring halls and provide information on employment opportunities.

7. *Government personnel office*

The federal civil service, state civil service, and local municipalities maintain employment offices. These offices are often located within federal buildings, (often the post office building), state building, court house, or city halls. Some may be located at installations or service establishments. Prior testing is often required before applications are acceptable.

8. *School placement services*

Many schools maintain offices that provide information on available employment. Often counselors will have job information.

DOs and DON'T's for job seekers ------- ---------- A GUIDE FOR EMPLOYERS

DOs

DO stress your qualifications and abilities for the job opening. Arrange this knowledge in your mind so that you can present it briefly and clearly.

DO recount experience you have had which would fit you for the job.

DO talk and think, so far as possible about the future rather than the past.

DO indicate where possible, your stability attendance record and safety experience.

DO remember that mature employees are more capable more dependable, more trainable, more careful and steady. Be mature.

DO try to learn ahead of time about the company and its products.

DO use good English. Speak enthusiastically, distinctly and clearly.

DO assume an air of confidence.

DO address the interviewer by his or her proper name and be sure to pronounce it correctly.

DO approach the employer with respectful dignity.

DO try to be optimistic in your attitude. Think right, think positive.

DO be a good listener do not try to do all the talking.

DO maintain your poise and self-control.

DON'Ts

DON'T keep stressing your need for a job.

DON'T discuss past experience which has no application to the job situation.

DON'T chew gum or smoke while being interviewed unless invited to do so.

DON'T apologize for your age

DON'T lean all over or sit on the corner of an interviewer's desk.

DON'T be untidy in appearance

DON'T display cocksureness

DON'T cringe or beg for consideration.

DON'T attempt to read or pick up any personal papers.

DON'T speak with muffled voice or indistinctly.

DON'T be one of those who can do anything.

DON'T criticize or abuse former employers or associates.

DON'T hedge in answering questions.

DON'T express your ideas on compensation, hours, etc., early in the interview.

DON'T carry a newspaper turned to help wanted ads.

DON'T hesitate to fill application, give references, take physical examination.

DOs

DO try to overcome nevousness or shortness of breath. (It helps to take a deep breath.)

DO be as gracious as possible to reception clerk, secretaries, etc. They may help you secure the position.

DO hold yourself erect.

DO be polite and courteous.

DO apply for a specific job or jobs.

DO answer questions honestly and with straight forwardness.

DO stress the contribution you can make to the enterprize.

DO have available a list of former employers, time and period of service, wages received, exact nature of work, and reasons for leaving.

DO apply for the job in person and alone.

DO let as many people as possible know you are "job hunting."

DO know the importance of getting along with people.

DO recognize your limitations.

DO be well-groomed and appropriately dressed. Make a presentable appearance.

DO try to use "you, your," rather than "I, me, my, mine."

DO smile (if you can do so naturally).

DO look the interviewer in the eye.

DO keep every interview appointment to the minute.

DO look for "work," not a position or just a job.

DON'Ts

DON'T discuss personal, domestic or financial problems.

DON'T hang around, prolonging the interview, when it should be over.

DON'T go to an interview without a record of your former work connections.

DON'T arrive late and breathless for the interview.

DON'T be a "know it all" or a person who can't take instructions.

DON'T argue with nor contradict an interviewer.

DON'T depend upon the telephone for your job.

DON'T isolate yourself from contacts who might help you find a job.

DON'T FEEL THAT THE WORLD OWES YOU A LIVING.

DON'T yawn or slouch in your chair while being interviewed.

DON'T assume an ungraceful or careless posture while being interviewed.

DON'T make claims if you cannot "deliver" on the job.

DON'T display a feeling of inferiority.

DON'T pretend to be something you are not.

DON'T be too serious.

DON'T act shy, nervous, embarrassed, or impatient.

DON'T use nervous gestures or mannerisms.

DON'T become discouraged, deliberately seek interviews so as to get practice.

TIPS IN WRITING LETTERS OF APPLICATION

I. Characteristics of a good letter of application:
   A. Attracts attention in the opening paragraph.
   B. Neat and properly arranged.
   C. Proper form--one page if possible.
   D. Correct spelling, capitalization, and punctuation.
   E. Good grade of 8 1/2 by 11 inch white paper--no personal or fancy stationery.
   F. Self-addressed, stamped envelope enclosed if you request an answer.
   G. Typed rather than handwritten unless a specific request for handwriting is made.
   H. Properly addressed.
   I. Properly signed.

II. The letter itself
   A. Should attract attention:
      1. Attracting attention is usually accomplished in the first paragraph, which should be relatively short, simple, direct, and well stated.
      2. Clever and unusual beginnings are sometimes successful but are many times misunderstood by some readers.
   B. Should arouse interest:
      1. Explain the purpose of your letter and how you learned of the position.
      2. Be sure to say that you are applying for a position or that you should like to be considered an applicant.
   C. Should create in the employer a desire to employ you:
      1. This portion of the letter should consist of two or more paragraphs, none of which should be too long.
      2. Show that you have some understanding of the requirements of the position for which you are applying.
      3. Explain the qualifications that you think make you eligible for consideration.
   D. Should attempt to secure action in the form of an interview or an offer of a position. The closing paragraph should contain a request for an interview and tell the reader where he can reach you.

III. Personal data sheet should include the following:

A. An appropriate heading such as Data Sheet, Personal Data Sheet, or Personal Data.

B. Personal details such as name, address, date of birth, age, weight, health, and marital status.

C. Educational qualifications. This should be a complete summary. Important subjects studied in high school and college should be listed.

D. Outstanding accomplishments and honors.

E. Information regarding work experience. Should include names of employers with beginning and ending dates of employment with each employer, and the type of position held. Part-time work in the school office, or elsewhere, should also be mentioned.

F. References (by permission). List the names and addresses of from three to five persons who would be willing to vouch as to your character and ability. Names of relatives should not be used. The best references in order of decreasing importance are former employers, teachers, associates on former jobs, neighbors, and personal friends.

WHAT THE RESUME OR DATA SHEET SHOULD CONTAIN

A resume or data sheet should consist of a minimum number of pages (one page preferably), neatly typed, and should contain the following information:

1. Name, age, height, weight, address and telephone number.

2. Social security number, marital and military status.

3. Educational background, including the names and addresses of all schools attended, years in which entered and in which graduated, courses of study and major subjects.

4. Work experience, including descriptions of any part or full-time employment, names and addresses of employers, dates of employment, names and addresses of immediate supervisors, and starting and ending salaries or rates of pay.

5. Extra-curricular activities, including school and community clubs and programs in which participated, and any offices held or honors received.

6. Leisure-time activities and interests, including hobbies and sports.

7. A list of references, including teachers, former employers, adult friends and community leaders (this list should include only individuals whom it is felt certain would be willing to make adequate recommendations concerning work performance, scholarship and character). This list should show full names, titles, address, telephone numbers and if possible occupations and place of employment.

8. Although not necessary, it is a good idea to clip or paste a small recent photograph of self to presentation.

Two copies of this presentation may be taken to each job interview. One copy can be left with interviewer, if he desires a copy. One copy can be used as a reference when filling out application blanks.

HOW TO FILL OUT AN APPLICATION BLANK

1. Do not hurry. Take enough time to read each item on the application blank.
2. Notice whether information requested is to be printed or hand written.
3. Notice whether last name is first or last.
4. Usually, unless stated otherwise, all information requested should be in ink.
5. Analyze information required with space available. Careful planning will eliminate erasures and strikeouts. If there is insufficient space, often it is better to place required information on back side of form or on a separate sheet. If this is done, be sure to cross reference, usually by using some item number or the first few words of the question. Example: on application - see Item 6 on back/or separate sheet, on back (or separate sheet) - Item 6.
6. Answer all questions if possible. On questions that are not applicable or impossible to answer questions, draw a horizontal line in the space provided. This indicates that the applicant has read the question.
7. Carry out all directions on the form. Ability to carry out directions is a determination in employing. Ask if the directions are not clear.
8. Be neat. Avoid ink smudges. Do not wrinkle application blank.
9. Be prepared. Bring a copy of your data sheet. It can be used for reference when filling out the application blank.

PROPER APPEARANCE FOR A FEMALE ON AN INTERVIEW

What is an interview?

A discussion between interviewer and applicant to evaluate the aptitude, training or progress of a prospective employee.

A. Cleanliness

1. Hair should be worn in a neat style. Avoid extreme styles and matty look caused by excessive use of hair sprays. Hair should be shiny and clean.

2. Make-up should be carefully applied and fresh. Avoid excessive use, such as eye shadow, thick mascara, heavy rouge, etc. Make sure your lipstick is straight and pick a color that is becoming rather than brassy.

3. A small amount of fresh cologne is fine. Avoid heavy use.

4. Hands and nails should be clean. Your nails should be a sensible length and neatly shaped. If polish is worn, choose a becoming shade, preferably to match your lipstick.

B. Clothes

1. A plain neatly tailored dress or suit is always acceptable. Be sure it is always pressed and clean. All buttons should be on. No safety pins please.

2. Hose should be clean and well fitting. Avoid choosing colors and designs. If seams are worn, make sure they are kept straight. No runners please.

3. Shoes should be clean and neatly polished. Heels should not be run down. Avoid extreme styles.

4. A neat, clean purse is a must. Have pen, pad, social security number, handy so you do not have to dig and keep your interviewer waiting.

5. If you wear gloves they should be neat and clean.

6. Avoid dangling pins, earrings, bracelets, etc. Avoid cheap brassy styles. Do not wear an excess of any jewelry.

7. You should above all be neat and clean. Be extremely careful to avoid body order. Always use a good deodorant. This is a must for everyone. Make sure teeth are clean and breath is sweet. Remember you are first judged by your appearance.

During the interview

When you have an appointment for an interview, always be on time. A late start is a poor start

Enter into the interview with confidence. Your attitude should be "What do I have to offer the company, "not" "What can the company offer me.

During the interview, listen. Give your interviewer your full attention. Answer the questions pleasantly and honestly. Try to know something ahead of time about the company so you can ask intelligent questions of the interviewer. Show your interviewer you are interested and willing to work, but do not press a company for an employment offer immediately. It is just as bad to appear too eager as it is to appear indifferent.

Company benefits, salary, etc. should be brought up first by the interviewer for discussion.

Remember to sell yourself. Be alert, pleasant, honest, and responsive at all time.

HOW TO ACT DURING YOUR INTERVIEW

Introduce yourself, telling briefly who you are and for what job you are applying. Don't call yourself "Mr.," "Mrs.," or "Miss."

After introductions are made, let the interviewer take the lead in conversation. He knows what information he wants.

The interviewer will ask you a number of questions. Answer them directly and truthfully. Use good English and avoid slang. Don't interrupt. Look at your interviewer while he questions you.

The interviewer will give you a chance to ask questions. Here's your opportunity to learn more about the nature and requirements of the job and its promotion possibilities. If you are offered the position, you have the right to ask questions regarding the hours of work and the pay, along with any other facts you want to know. But don't ask about salary, working hours, or vacation policy immediately. If the interviewer thinks you are more interested in those aspects of the job than in the actual duties, he will not be eager to put you on the payroll.

Be your most agreeable self during the interview. Getting along well with others is a part of every job. Be as poised as possible. Do not yawn or slouch in your chair. Do not assume an ungraceful or careless posture. Do not play with your tie, rings, or pencils. Remember that the letters and papers on the interviewer's desk are his personal property. Don't try to read them. Leave your gum and cigarettes in your pocket.

At the close of an interview, thank the interviewer for the opportunity of talking to him.

QUESTIONS YOU MAY BE ASKED

The following are some of the questions frequently asked by interviewers.

1. Are you looking for a permanent or a temporary job?
2. In what type of position are you most interested?
3. What do you know about our company?
4. Why do you think you might like to work for our company?
5. Why do you think you would like this particular job?
6. What qualifications do you have that make you feel that you will be successful in your field?
7. What are your ideas on salary?
8. How do you spend your spare time. What are your hobbies?
9. What courses in school did you like best? Least? Why?

CAREER ORIENTED CLASSROOM ACTIVITIES

I. DEMONSTRATION ACTIVITIES

A. Drama

1. Involving one job cluster.

   a. See IOWAscript index or Career Finder index

   b. Example -- Health Occupations

      Registered Nurse
      Nurse Aide
      Orderly
      Inhalation Therapist

2. Show interaction of jobs (all jobs are important).

3. Students do research for their part in the play or drama.

   a. See IOWAscripts.

   b. Contact references listed in IOWAscript "Where to Get More Information."

4. Props -- may involve tools and/or materials used on the job.

B. Role Playing (Pantomime)

1. Less involved than drama.

2. Two or three participants.

3. Show job characteristics.

   a. See IOWAscript "To Get the Job" and "On the Job."

4. Usually more spontaneous.

C. Who am I? / Twenty Questions

1. A student can read an IOWAscript for information about an unfamiliar occupation and use this as a basis for the questions. If all students know the format of the IOWAscripts it will form a framework for this game.

2. One student chooses an occupation and the rest of the class guesses by asking yes-no questions (limited to 20 questions.)

a. Example: "Does this worker work out of doors?"

3. Student who guesses gets prize, praise, or privilege -- or gets to be "it" next time.

D. T.V. -- Radio Interview

1. One student pretends to be employed in an occupation and another interviews him about his work.

a. This should be carefully prepared from fact and not from hear-say and observation. A very verbal student may tend to go beyond actual knowledge and use ideas picked up about working conditions and especially starting salaries.

E. Guest lectures by Parents or other Employed adults

1. BE CAREFUL

a. A little knowledge can be dangerous. This is an excellent way to help build a positive self-concept of parental worth in the world of work on the part of lower elementary children--but an instructor needs to have facts. Some jobs have several different titles, some have different responsibilities within the same title, the same title may have different entry requirements from one employer to another, etc. Get the facts before the speaker arrives so you can guide questions to promote better understanding on the part of the students.

F. Work Simulation

1. Students can develop demonstrations using tools of some occupation, explain some procedure or need and reason for special clothing. IOWAscript indicates much of this in the "You Should Know" and "On the Job" sections.

G. Field Trips

1. See special section "Career Exploration Field Trips."

H. Puppet Show

1. This is an excellent way to bring out attitudes as to how children view the various occupations in the world of work. Self concepts of the individuals placed in an occupation will develop if students make their own puppets and write or ad-lib the dialogue.

II. Language Activities

A. Publish a career newspaper.

1. Interview workers.

2. Write articles describing jobs.

    a. Research to find requirements for jobs.

3. Set up newspaper to simulate a newspaper publishing business.

B. Slides and Filmstrips

1. Have students take pictures of workers at various tasks in an occupation. Stress activity, clothing, work environment, and any unusual features of job.

2. Develop narrative for film. This should be taped so data will not be lost and can be used in a variety of learning situations. Verify facts from IOWAscript information.

C. Notebook

1. Students working in groups can prepare a scrapbook type notebook on an occupational cluster.

2. Individual students may prepare a notebook on a specific occupation from a cluster with the plan to cover several clusters over a specified period of time.

D. Scrambled Sentences and Words

1. A "fun" activity that can be used for a "breather" but will emphasize the world of work thought process.

    a. Example

        1. "Bills for prepares a billing clerk customers."

        2. "A billing clerk prepares bills for customers."

    b. Example

        1. "tionauceer"

        2. "auctioneer"

E. Hangman

1. Another "fun" activity

    a. One student thinks of an occupation and puts the correct number of blanks for the letters on the board or overhead projector.

    b. Classmates take turns guessing letters -- wrong guess puts one part on the body of the "hanged man."

2. Student who guesses the occupation is "it."

3. Select occupations from IOWAscript deck so spelling can be verified as well as develop use of occupational literature.

F. Story Writing

1. Story should be directed to world of work activity. This is a good activity to express attitudes and self concepts. Some direction as to subject or topic will help organize the students' thinking.

2. Sentence completion such as: "I like to _____," "I cannot _____," and "If I could I would _____," all provide a quick means of expression to follow occupational discussions.

G. Crossword Puzzles

1. Either student or teacher constructed puzzles can be used for vocabulary of a job cluster, jobs within a cluster, or terms used for an occupational discussion.

III. Current Events

A. What is happening within the world of work theme is excellent for current events. Syndicated articles are national in scope and may need to be evaluated for accuracy on local level -- just because it is in print, it may not be fact for your area.

IV. Bulletin Boards

A. Bulletin boards stressing clusters will give a more complete story. Specific jobs within the cluster that are available locally can bring more realistic thinking than the use of national scope posters etc. Don't forget to change materials.

V. Classroom Product Production Projects

A. See suggestions in the "An Approach to Career Education", page 28.

B. Types of production projects* might be:

1. Cookie production

2. Candy production

3. Bird houses

4. Receipe holders

5. Book marks

6. Paper weights

*Consumable products such as cookies and candy are the easiest to retail.

VI. Crafts

A. Mobiles

1. Mobile of worker in various phases of his job.

2. Mobile of jobs from one occupational cluster.

B. Collage or Mural

1. Pictures of people in occupation showing worker on the job until the product or service is finished.

2. Pictures of the products workers make.

C. Picture Drawing

1. May be done after observing people on the job.

2. Listen to job description and then draw impression.

3. Read description on own and then make drawing.

D. Work Station

1. A certain area of the classroom may be devoted to visualization of job cluster-- this could include tools and materials from job to be handled and experimented with.

a. Example: <u>Health Occupations</u>
Doctor's bag and instruments
Patient record forms and charts
Laboratory equipment
Rubber gloves, masks, hospital gowns

b. Example: <u>Building Trades</u>
Hammers, nails, trowels, pliers, paint brushes, plumb lines, etc.
Paint, bricks, electrician's wire and tape, pipe, wood, etc.
Blueprints, measuring tapes, levels, etc.

Career Exploration Field Trips

A field trip can be a teacher's nightmare or it can be a most rewarding educational experience. The chief difference is teacher-student preparation.

A field trip for the purpose of exploring careers differs from the usual field trip in that the primary focus is on the worker, the job, tools of the trade and work environment, with the secondary focus on the product produced or service provided. Pre and post-trip activities will make the difference between a successful learning experience and just time off from school.

This outline for field trip planning is general and will need to be modified according to the business or industry visited.

I. Prior to the Trip

A. Study types of jobs to be observed.

B. List what products and services are being produced or provided by the worker in this job.

1. Stress what the worker does to produce the product not the product itself.

C. Study the vocabulary related to the particular cluster of jobs to be observed.

D. Identify some tools and material that will be in use.

E. If special safety equipment is needed, discuss this.

1. Safety glasses, welding helmets, gloves, or shoes.

F. Have students write questions they may want to ask.

G. Stress importance of good conduct on trip.

1. Safety precautions
2. Accident prevention
3. Listen
4. Look
5. If possible - Ask

H. IOWAscript materials will cover many of the points mentioned above. They can be used to arouse interest in specific areas or to show the

interdependence of many jobs. Tools required for jobs, safety requirements and special skills needed can be identified from the script.

II. During the Trip

A. A pre-trip preview by the guide, of things to see, activities to watch and special things to note will be useful to develop awareness on the part of students.

B. During the trip jot down questions to be asked if talking is difficult.

C. If possible question workers about their job.

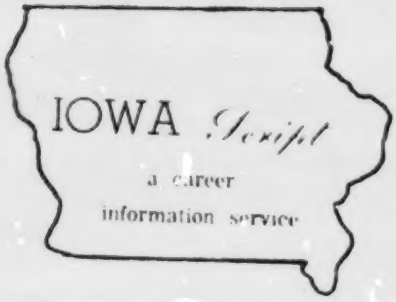
D. A post-trip question and answer session will be valuable if questions cannot be asked on the tour.

III. Follow-up of Trip

A. Use any activities listed in the "Career Education Idea Handbook" to reinforce information from trip.

B. Thank-you letters are always welcome, not only to owners and managers, but to guides and workers who have helped.

C. IOWAscript materials will clarify some points about jobs or help in some follow-up class activities.



A CAREER EXPLORATION GUIDE

(Grades 7-12)

des moines area community college

2006 ANKENY BLVD., ANKENY, IOWA 50021

515 964-0651

an exemplary project in career education developed in cooperation with the iowa department of public instruction

Introduction

This Career Exploration Guide has been developed for use in the Junior and Senior High School levels. It can be used as a group activity or for individual instruction, either in total or by selected portions.

You may need to change parts of the material to meet your specific objectives and guidance structure. Before this is used, an explanation of IOWAscript materials and the career cluster concept will be very helpful. Relationship of one occupation to another and the need to study entry level occupations will help clarify what is to be accomplished by use of this unit.

A word of caution: although the unit is designed for use with IOWAscript materials, other occupational materials will be useful, but caution students to check publication date and place to determine if the information is applicable for local employment conditions.

Any suggestions as to use or changes will be appreciated by the IOWAscript staff.

CAREER
EXPLORATION
WORKSHEET

The selection of an occupation is a very difficult but important decision in your life. It is sometimes hard for high school students to begin thinking of careers and as a result many young people graduate from school and enter an occupation which they really haven't thought much about. To avoid this situation you should begin exploring careers now.

A good way to prepare for your future career decisions is to (1) get to know yourself better and (2) get acquainted with the world of work. Once you do this you can take what you know about yourself and match this information with a job that seems to fit you.

The first section of this worksheet is designed to help you get to know yourself better and the second section will help you in learning about various occupations. Your counselor will be glad to help you with the questions that will problably arise.

CAREER EXPLORATION

RATIONALE:

Abilities are a part of your personality. They are things you are capable of doing and important considerations in choosing an occupation.

OBJECTIVES:

To find what you can do and like to do best

ACTIVITY NO. 1

List as many of your abilities as you can.

EXAMPLE: It is easy for me *to meet new people*

It is easy for me *to get good grades in agriculture*

It is easy for me *to lift 100 pounds*

It is easy for me _____

It is easy for me _____

It is easy for me _____

It is easy for me _____

It is easy for me _____

It is easy for me _____

It is easy for me _____

It is easy for me _____

It is easy for me _____

It is easy for me _____

It is easy for me _____

It is easy for me _____

It is easy for me _____

It is easy for me _____

It is easy for me _____

It is easy for me _____

ACTIVITY NO. 2

Ask your counselor for an evaluation of all the standardized tests that you have taken in school.

ACTIVITY NO. 3

List abilities you do not possess.

EXAMPLE: I do not find it easy to *swim*

I do not find it easy to _____

I do not find it easy to _____

I do not find it easy to _____

I do not find it easy to _____

I do not find it easy to _____

I do not find it easy to _____

I do not find it easy to _____

I do not find it easy to _____

I do not find it easy to _____

I do not find it easy to _____

I do not find it easy to _____

I do not find it easy to _____

I do not find it easy to _____

I do not find it easy to _____

I do not find it easy to _____

EVALUATION:

Recheck your lists and add to them any abilities that you have overlooked.

CAREER EXPLORATION

RATIONALE:

Goals are part of your personality. They are things you desire to do in the future. Some careers will help you more than others in meeting your goals.

OBJECTIVE:

To be aware of and identify your future goals.

ACTIVITY NO. 1

List as many goals as you can think of.

EXAMPLE. I desire to finish high school

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

I desire to _____

ACTIVITY NO. 2

Interview a person of your sex, twice your present age, about their goals. List some of them.

1. _____ 6. _____
2. _____ 7. _____
3. _____ 8. _____
4. _____ 9. _____
5. _____ 10. _____

ACTIVITY NO. 3

List three of your more important goals and explain how you intend to fulfill them.

1.

2.

3.

EVALUATION.

Review your goals. If there are any of them that you are doubtful you will attain, list them and tell why.

1. _____
2. _____
3. _____

CAREER EXPLORATION

RATIONALE:

Each individual is unique in himself. In order to explore a future career for yourself, you should first know some things about your individuality. Interests are part of your personality. They are things you enjoy doing.

OBJECTIVES:

To be aware of and identify your interests

ACTIVITY NO. 1

List all the interests you can think of that you possess.

EXAMPLE: I like *to swim*

I like *to read sports magazines*

I like *to be alone*

I like _____

I like _____

I like _____

I like _____

I like _____

I like _____

I like _____

I like _____

I like _____

I like _____

I like _____

I like _____

I like _____

I like _____

I like _____

I like _____

ACTIVITY NO. 2

Ask someone you know, parents, friends, etc., to name 5 interests they think you possess.

1. _____
2. _____
3. _____
4. _____
5. _____

ACTIVITY NO. 3

List the interests people have that you do not enjoy. List them in specifics.

EXAMPLE: I do not like *to read*

I do not like *to be alone*

I do not like *movies*

I do not like _____

I do not like _____

I do not like _____

I do not like _____

I do not like _____

I do not like _____

I do not like _____

I do not like _____

I do not like _____

I do not like _____

I do not like _____

I do not like _____

EVALUATION:

Recheck your lists and add to them any interests that you have overlooked. You may want to ask your counselor about taking an interest test.

OCCUPATIONAL STUDY

If you now feel you have some awareness of your interests, abilities, goals, and some idea of occupations you would like to investigate, you are ready for IOWAscript. It will help you get a realistic idea of requirements, qualifications, preparation, training, prospects, opportunities, training programs, local labor prospects, contacts to make, salaries, and things to read for each occupation. This section will help you organize the information you are finding about careers. Your counselor will explain how to use the IOWAscript deck of cards. They will answer most of the questions.

PART 1 - QUESTIONS

The questions listed below are intended to help you in your search for the kinds of facts you will want to get before you decide whether or not to choose a particular occupation as a career. If any question does not apply to the occupation you are studying, ignore it. It any question would require excessive work in order to get information that you are sure would have no effect upon your occupational choice, ignore it. Use this outline, not as a blueprint of rigid specifications, but as a checklist, to be sure you do not overlook any item of importance to you. Use it also as a guide in taking and in arranging your notes for any reports you may prepare.

INTRODUCTION

Interesting facts about the service which workers in this occupation render to other people, about the origin and history of the work, etc.

FUTURE PROSPECTS

Are workers in demand today? Give evidence. Is employment expected to increase or decrease? Much or little? Why? Can a person practice this occupation anywhere he wishes to live?

NATURE OF WORK

Check your description of the work against the following list of words to see if you have told all that you should. Must the worker:

Walk	Kneel	Reach	Handle
Jump	Stand	Lift	Finger
Run	Turn	Carry	Feel
Balance	Stoop	Throw	Talk
Climb	Crouch	Push	Hear
Crawl	Sit	Pull	See

Is the work done inside, outside, or both? Is it done under abnormal conditions of high, low, or changing temperature? Is the place of work likely to be dry, humid, wet, dusty, dirty, noisy, cramped, inadequately lighted or ventilated, malodorous? Is the work done with others, around others, or alone?

QUALIFICATIONS

Age. What are the upper and lower age limits for entrance and retirement?

Sex. Is this predominantly a male or female occupation? Are there reasonable opportunities for both? Is there any more active demand for one than for the other?

Height and weight. Are there any minimum or maximum requirements? What are they?

Other physical requirements. Are there any other measurable physical requirements, e.g., 20/20 vision, freedom from color blindness, average or superior hearing, physical strength? Be specific. Don't generalize about "good health" and other desirable qualities needed in all occupations.

Aptitudes and interests. Has there been any research on aptitudes required? Has any vocational interest test been validated on workers in this occupation?

Tools and equipment. Must these be supplied by the worker at his own expense, as a carpenter must furnish his own tools. What is the average cost?

Legal requirements. Is a license or certificate required? Where and how does one get a statement of the requirements? In general, what are they?

Unions. Is the closed shop common or predominant? If so, what are the requirements for entrance to the union? Initiation fees? Dues? Does the union limit the number admitted?

Discrimination. Do employers, unions, or training institutions discriminate against Negroes, Jews, others? What is the evidence? If you find unsupported assertions of discrimination and similarly unsupported denials, say, "It has been asserted and denied that ..."

Preparation. Distinguish clearly between what is desirable and what is a requirement for employment.

How much and what kind of preparation is required to meet legal requirements and employers' standards?

How long does it take? What does it cost? What does it include?

What schools offer training for this kind of work?

What provisions, if any, are made for apprenticeship or other training on the job?

Is experience of some kind prerequisite to entrance? Describe.

Entrance. How does one get his first job? By taking an examination? By applying to employers? By joining a union? By registering with employment agencies? By saving to acquire capital and opening his own business? How much capital is required?

State types of places in which the worker may find employment.

Advancement. What proportion of workers advance? To what? After how long and after what additional preparation or experience?

What are the related occupations to which this may lead, if any?

Earnings. What are the most dependable average figures you can find on earnings by week, month, or year?

Pay most attention to beginning wages and average wages of all workers. Avoid misleading emphasis on the exceptional worker who is highly paid.

Include extra earnings from tips, commissions, free board and room, expense allowances for auto, travel, etc. Mention deductions for uniforms, union dues, pension and insurance plans, etc.

Are earnings higher or lower in certain parts of the United States or in certain branches of the occupation?

Advantages and disadvantages. Here list what workers say they like best most about their jobs.

List things workers most dislike about their jobs.

Are hours regular or irregular, long or short? Is there frequent overtime or night work? Sunday and holiday work?

What about vacations?

Is employment steady, seasonal, or irregular? Does one earn more or less with advancing age, e.g., professional athletes? Is the working lifetime shorter than average, e.g., models?

What skills required transferable to other occupations?

Is the work hazardous? What about accidents, occupational diseases?

Is the worker exposed to:

Vibrations	High places	Explosives
Mechanical hazards	Danger of burns	Radiant energy
Moving objects	Electrical hazards	Toxic conditions

In comparison with other occupations requiring about the same level of ability and training, in what ways is this one more or less attractive?

Include here anything important not covered under other headings.

Related occupations. What are the related occupations which might prove acceptable to the person who thought he wanted to enter this one but finds either himself or the occupation lacking something?

Sources of further information. Names and addresses of major professional associations and other organizations from which you got helpful information.

PART II - WHAT ARE YOU GOING TO DO ABOUT IT?

The purpose of this section is to help you to compare what you now know about this occupation with what you know or can learn about yourself. You are to fill in the blank which follows. This will involve some repetition of facts you have already recorded elsewhere. This repetition is necessary in order to help you to select and to bring together the most important facts, so that you can get a good look at them and decide what your next steps should be.

1. Duties. List here all the things you would have to do in this occupation that you think you could do well and enjoy doing.

2. List here all the things you would have to do in this occupation that you think you could not do well or that you would dislike doing.

3. Physical requirements. List here any physical requirements that you must meet in order to enter this occupation, e.g., height, weight, 20/20 vision, freedom from color blindness.

4. List here any of these requirements that you think you might find it hard to meet.

5. Aptitudes. List here any aptitudes in which you must be better than average, in order to do satisfactory work in this occupation, or to get the training necessary to enter it, e.g., mechanical aptitude, clerical aptitude, scholastic aptitude, finger dexterity, pitch discrimination, reaction time.

6. List here the names of any tests you have taken to measure these aptitudes and the results of the tests and any other evidence of the aptitudes you possess. List also the results of any tests you have taken to measure your interest in this occupation and any other evidence of your interest in it.

7. Preparation. List here the number of years of high school and college training that you would have to have to enter this occupation.

High school _____ College _____

8. List here the number of years of high school and college training that you think you have the ability, the money, and the desire for.

High school _____ College _____

9. Earnings. List here how much money you think you could earn in this occupation.

First year $_____

After five years $_____

After ten years $_____

10. List here how much money you think you would have to earn in order to feel that you were doing about as well as you have a right to expect.

First year $_____

After five years $_____

After ten years $_____

11. Other requirements. List here any other requirements that you must meet in order to enter this occupation, e.g., license requirements, examinations, union membership.

12. List here any of these requirements that you think you might find it hard to meet.

13. List high school subjects you have taken that would be helpful.

14. List high school subjects you need that you can take before you graduate.

15. Number of jobs. List here how many persons are employed in this occupation in the community in which you wish to work.

16. List here the best estimate you can get of how many jobs in this occupation become vacant each year, in the community in which you wish to work.

Job satisfaction. Ask several persons now working in this occupation what they like best and dislike most about it.

17. List here the things that most of them say they like most.

18. List here the things that most of them say they dislike most.

19. Miscellaneous. List here any other reasons why you think this would be a good occupation for you to enter.

20. List here any other reasons why you think this would not be a good occupation for you to enter.

SUMMARY Go back over the things you have written on the preceding pages and:

21. List here the most important reasons why you think this would be a good occupation for you to enter.

22. List here the most important reasons why you think this would not be a good occupation for you to enter.

23. Tentative decision. If you had to decide today whether or not to enter this occupation, what would you decide, and why?

PERSONAL EVALUATION

Now that you have read the description and characteristics of this occupation take a minute now to reflect on your own characteristics and self description

Listed below are some check points to help you to see if your picture of yourself is similar to the occupational description presented in the preceding six pages. There will probably be many areas that you are not sure of yet as well as those to which you can definitely give an "O.K." or "No." This occupational description is intended to serve as a brief resume—not a complete report. Your counselor has additional information on both you and this occupation.

	O.K.	Not Sure	No
Personality Traits			
Abilities Needed			
Physical Traits			
The subjects I am now taking and plan to take will allow me to enter this occupation and advance in it			
Ability to finance this training			
Opportunities for me in this occupation			
Suitability of the hours of work, salary, fringe benefits			
Suitability of the job duties			
I will be able to get training in this field from a local school			

If you have answered some of these check points "Not Sure" or "No" and you still wish to leave this occupation in as a possibility, you should

. Talk this matter over with your counselor, and . . .
. Check further into the sources of additional information listed on page 4

WHY YOUNG PEOPLE FAIL TO GET AND HOLD JOBS

IOWA EMPLOYMENT SECURITY COMMISSION

Iowa State Employment Service

UNREALISTIC WAGE DEMANDS

RUDOLPH K., a husky 20-year old who left school in the 8th grade, has held unskilled laboring jobs. He quit a job as a laborer with an artificial flower manufacturing company after one year because he felt the wages were too low. His next job was as a factory laborer at a high rate of pay doing extremely heavy work.

But now, after an operation, he can no longer do heavy work. Nevertheless he insists on a salary equal to that earned previously. As long as he insists on the "big money" he earned doing work he is no longer able to do, he will remain unemployed.

JANE C., 17 years old, a high school graduate, attractive and well-dressed, had one year of typing, one year of office practice, one year of bookkeeping. She wanted to operate business machines. Employment Service tests revealed she typed 30 words a minute with fair accuracy.

The Employment Service offered her a job with a large firm which, after a period of general office work, gave special training. The firm paid the locally prevailing wage for general office clerks.

But Jane wanted at least $5 more. She spent a lot on clothes, she said; besides, her girl friend earned more. Although it was pointed out that the special training given by the employer would soon enable her to get an increase of $5 a week, and eventually more, she refused to consider the job.

SUSAN G., 18 years old and a June graduate of a commercial high school applied to the Employment Service for a job as a stenographer. She stated she would not consider working for less than $80 a week. It was explained to her that, without experience, such a salary would be hard to get.

She had recently read a newspaper article saying there was a shortage of stenographers and anyone who could take dictation, type and breathe, could demand such a salary. The counselor told Susan what the usual salary would be for a beginning stenographer but pointed out that with experience she could expect to advance and ultimately reach her goal. Many jobs were discussed but she refused to go to any interviews, even though some interested her in every respect except salary. If she persists in demanding a salary which she is most unlikely to get, she will not only remain unemployed but also lose her much-needed skills.

EDWARD P., 18, was graduated from high school in January. He had majored in photography, built his own dark room, and spent most of his spare time taking pictures and developing them.

The Employment Service referred him to a job as dark-room worker at the prevailing wage rate, and he was hired. Three months later he was back saying he felt he was worth more money. He said that another employee doing exactly the same work was paid $15 a week more. He admitted, however, that the other man had been with the firm for three years and was called upon to do special work in emergencies.

As Edward was relating these facts, he saw for the first time that he could not consider his experience or usefulness equal to that of the other employee, even though they both did the same work most of the time. After this insight, he was willing to accept another dark-room job at the same wages, or even less, if necessary.

ATTITUDE AND BEHAVIOR

DOROTHY A. is 17, attractive, neat, well-groomed, has a good personality. She likes to meet people, enjoyed her part-time experience as a clothing sales clerk, showed real selling ability.

She has other assets: two years of typing, two years of shorthand, one year of secretarial practice, and one year of bookkeeping. She types 45 wpm, takes dictation at 90 wpm. She had typed for the school paper and for one of her teachers. She liked her secretarial courses in school, found them easy. But, when interviewed for a job, Dorothy showed no interest in sales or secretarial work. Her girl friend was a telephone operator - and that is what Dorothy wanted too. She may land a job as telephone operator; she may like it. On the other hand, she may find it dull. Then she will have lost valuable time and her skills will have deteriorated.

ANN, 17, a recent high school graduate, completed a commercial course, including three years of shorthand and typing, and one year of bookkeeping. Attractive, well-groomed, alert, and intelligent, she ranked in the upper third of her class and was popular.

Because of her training and appearance, she was referred to a large utilities company as a business representative where she would contact customers, handle complaints, make arrangements for new telephone installations, answer inquiries and refer customers to appropriate officials. Incidental duties were recording telephone conversations in shorthand and transcribing them.

She was tentatively hired, and told she would be notified when to report for work. Soon after the interview, however, she telephoned the company to ask why she had not been called. Her sarcastic tone resulted in her not being hired for the position.

SANDRA Z. first applied at an Iowa State Employment Service office at the age of 16. She said she needed a job urgently because, her parents having moved to California, she was living with a sister. It was extremely difficult to find employment for a 16-year-old high school drop-out with no specific skill.

When an interview with an employer was finally arranged, and he told her the pay, she immediately replied that friends advised her not to work for those wages.

The employer phoned the counselor and said he would not hire this applicant under any circumstances; her attitude and manner were so unsatisfactory that he felt that she should not be referred again.

ANITA B. was a 17-year-old high school graduate who had successfully completed a commercial course, including 2 years of typing and bookkeeping. She had an evident flair for figures and was considered a top student. For 2 summers she worked in the accounting office of a family friend, operating various types of business machines. Her skills were good and currently in demand. She had poise, excellent appearance and seemed mature for her age. An immediate interview was arranged. After the interview, the employer reported that A. B. was interested in very little except the company benefits. The impression she left was not what she could contribute to the firm, but what could the firm do for her.

APPEARANCE

JEAN S., a pretty 17-year-old came to the Employment Service with a very spotty work history: jobs lasting two or three months as counter-girl, waitress, meat packer, five-and-ten sales clerk. She dressed sloppily, chewed gum with sound effects, and had her heart set on a sales job.

The counselor discussed with her the importance of neat appearance in sales work. Jean seemed impressed. Soon her appearance and manner improved considerably. She stopped snapping gum during interviews, made an evident attempt to be neat and well-groomed. As a result, she was placed in a sales job where her good looks and friendly personality will be decided assets.

MARTHA D., a pretty 18-year-old high school graduate, turned to the Employment Service after months of fruitless jobseeking.

Although it was winter, Martha went job-hunting without stockings, wore "loafers", a kerchief, and long coat, only partly concealing a soiled, unpressed dress.

Fortunately, Martha had much-needed business skills, and with attention to good grooming could easily land a job. Following the counselor's suggestion, Martha reported a few days later neatly and appropriately dressed. She got her job on the first try.

GLEN F., 18 years old, moved from home to live with his grandmother in a distant city where he hoped to find better opportunities. At the interviewer's desk he appeared fairly neat except for nicotine-stained fingers and long, not-too-clean fingernails. He had only worked a month on each of his last two jobs (baker's helper and usher). Before this, he had worked for his uncle one year as a grocery sales clerk, a job he liked. He hoped to get back into food store work, and would accept any such job.

When asked why he left his job as sales clerk, he replied that after a misunderstanding between his mother and his uncle, she had advised him to quit. He has been unsuccessful in finding work in stores and restaurants even though willing to accept simple routine jobs at low pay. The interviewer advised him that employers dealing with foods place special emphasis on appearance. He was reminded that dark nicotine stains and poorly kept fingernails are a handicap, especially for this kind of work. So Glen took the hint, and shortly afterward landed a job as sales clerk in a meat market.

CARL M., a 20-year-old, graduated from high school with a general diploma. He seemed to have potential in sales work; and his interests, too, were strong in dealing with the public. The one drawback was his appearance. He looked as if had slept in his clothes; he was unshaven and needed a hair cut. The counselor discussed the importance of good grooming, particularly in the sales field; he told Carl that an interview would be arranged for him, but before going he should "dress up". The job on which Carl was referred was that of a sales clerk in a hardware store in a small community. The employer reported to the counselor that Carl appeared for the interview so well dressed that he felt Carl would be out of place in his type of establishment. Moral: Overdressing, like slovenliness, should be avoided.

ALICE S., 18 years old, recently graduated from an academic high school. Because of financial circumstances she was unable to continue her education. She was an above average student, but not scholarship material. Her assets were her attractiveness and outgoing personality, combined with intelligence and willingness to learn.

She worked for one summer as a cashier, said she loved talking to people and having responsibility. She had applied for numerous jobs, including cashier, receptionist and salesperson but was not hired. The counselor noted that A. wore very heavy make-up and was dressed to the hilt, including many bracelets, and rather outstanding costume jewelry. She suggested that A. tone down the make-up and dress more simply during working hours. The suggestion was well received and when A. returned to the counselor, suitably groomed, she was referred to a large firm as an office representative and immediately hired.

BALKS AT ENTRY REQUIREMENTS

[redacted]LTER G., 19, just completed a high school course in house wiring and motor repair. He preferred doing this kind of work, but was willing to do any work in the electrical industry in which he would have a chance to use his skills.

He was sent to a public utility company for a trainee job leading to various mechanical and technical positions. For the first three to six months he would be required to work as a messenger, gradually working into the mechanical and technical levels. If after two years he had not been promoted to a technical level, he would have to resign.

Walter turned down the job because of the messenger duties, stating that since he was trained for electrical work he should not have to start with delivery work. He was unwilling to accept the fact that the company was using the delivery job as a means of evaluating his ability to work with others, come in regularly, and follow instructions, before advancing him to a technical job.

This cost him an opportunity with a reliable firm where the possibilities for promotion are unusually good.

ERNEST P., 18 years old, a high school graduate, was referred to a Bindery as a hand cutter at the prevailing rate. He accepted the referral card eagerly, reported promptly, and impressed the employer with his appearance, his level-headedness and his ability to grasp details. Ernest was hired.

He worked until lunch time. When work resumed he called the employer over, told him how hard he had worked all morning. Surely the employer could see by now how good a worker he was. Therefore, he was asking for a $10 a week raise. Ernest was promptly fired.

BETTY E., 20, was graduated last June from a Junior College specializing in creative, technical and management training in the apparel industries. She majored in apparel design, worked part time as a trainee assisting the designer in the sample room of a sportswear manufacturer. After graduation she held the same job for a firm making cotton dresses. Recently, she was a fashion reporter for a retail news bureau, but quit after three weeks because she "wants to be a designer".

At the Employment Service, Betty told this to the counselor, who, after reviewing Betty's qualifications, explained to her the advantages of accepting a trainee job in the sample room as a stepping stone to designing. A specific job as a samplemaker of teen-age dresses, with the possibility of designing eventually, was discussed. But Betty would consider only a designer's job. After looking unsuccessfully for such a job, however, she accepted a referral as sample room trainee and was hired.

FRED M., 18, was employed as a cosmetics packer. When production lagged because of material shortages, the firm gave employees other tasks to keep all working full time without layoffs. Fred M. and others were asked to sweep floors. The other men in the department willingly cooperated, but Fred refused and quit. After two unsuccessful weeks of job seeking he was sorry and wished he had his old job back, but it was too late--the employer would not rehire him.

INSUFFICIENT TRAINING

PATRICIA Y., 17, left high school after three years in a commercial course, because she has tired of school. She took a job as a garment ticketer in a firm where she had previously worked one summer. She stayed a few months, and then quit to get an office job. Although she had not yet done any job hunting she was optimistic, having heard that "stenos and typists are badly needly now." The Employment Service counselor discovered she had done no typing or stenography in the past year and had never attained satisfactory speed. Patricia knew nothing about standards of speed and accuracy, and in addition, had not realized that without practice her very elementary skill would deteriorate.

Patricia has been referred on one or two office jobs. She has also been looking on her own, so far without success. Perhaps she will decide to return to night school to finish her high school education and brush up on her typing skill.

ANGELINA I., 18, visited the Employment Service three months after graduation from high school. She had taken a dressmaking course and had already spent those three months unsuccessfully seeking a sewing machine operator's job. She was rejected after a brief performance test with a curt "You're not qualified." Angelina felt her years of trade school training were wasted. Discussion revealed that her only training was on a home electric model and that she was totally unable to handle the industrial power machine. This was immediately apparent to employers, but not to her.

The counselor helped her evaluate her current and potential skills. As a result, Angelina plans to accept immediate employment at hand sewing while enrolling for training in power machine operating.

FAILURE TO NOTIFY EMPLOYER OF ABSENCE

JEAN S., 17 years old, was graduated from high school with a general course diploma. A year of typing and business arithmetic were her only commercial subjects; her marks were average. When interviewed by the Employment Service school counselor before graduation, Jean said she wanted to do clerical work. She was placed as a keypunch operator trainee.

Two months after starting, she wrote to thank the interviewer who had placed her, saying how much she liked the job. But three months later she quit. At the Employment Service, she explained that personal problems caused her to be absent from work a great deal and left because she thought she would be laid off anyway. Now, she was ready to start working again and wanted to continue as a keypunch operator.

As far as actual work was concerned, she had a satisfactory record; but the counselor pointed out that her absentee record and her lack of effort to correct it would make it hard for her to get another job. Jean doubted this because her work was satisfactory.

After several job interviews resulted in failure, because of the poor reference from her first employer, she came to the Employment Service completely discouraged, saying she would take any kind of job, any place, just to be able to correct her absentee record.

ARTHUR W., 16, a high school drop-out, seemed eager to obtain a job -- any job. Openings for sixteen-year-olds are scarce, but the interviewer found one for a messenger at $1 an hour. The boy got the job, but at the end of the week returned to the Employment Office. He told the interviewer, "I guess the boss didn't like it. I worked three days, and then I stayed out." He had to help out at home, and didn't call the "boss".

JOHNNY P., 18, was referred to an employer for an interview. The employer hired him and told him to report at 8:30 A.M. the next day. He reported at 10:00 A.M. instead, and, of course, the job was filled. Johnny had a good excuse this time for not reporting on time, but failed to notify the employer.

REPUTATION FOR UNRELIABILITY

RICHARD N., almost 18, has been in the labor market for two years since leaving school in the eighth grade. With a pleasing appearance and likeable manner, he makes a good first impression.

But, since leaving school, Richard has held some fifteen jobs, one lasted 3 months, most of the others one to two weeks. The last time he applied for a job, the employer refused even to take his application.

Now registered with the Employment Service, he may be helped to find another job. But with his limited education and poor work record, his prospects are bleak.

ALBERT W., an 18-year-old, quit high school at sixteen. He then held two jobs, both obtained by answering advertisements: first, he washed cars (fired after 6 weeks for arguing with the boss); next, after 8 months of unemployment, he was a porter in a retail store (quit after 3 months, saying he "didn't like the manager," and the job was too far from home).

Now he insisted to the Employment Service counselor he wanted a 40-hour job at $60 a week working with machines.

Although Albert lacked the education, training, or experience for such work, aptitude tests revealed that he had the potential for learning machine shop work. It was explained to Albert that, if we were able to find a trainee job for him, it would probably pay $1.10 an hour. Albert seemed pleased at the possibility of learning a skill and eventually earning more. The interviewer finally located a trainee job for Albert, but after a month Albert was back in the office - he felt he had worked at $1.10 long enough; he wanted more money, so he quit the job. It will be increasingly difficult for Albert to find employment with this kind of work record.

NORMA G., 17 years old and soon to graduate, was completing a commercial course. She had one year of bookkeeping, 2 years of typing, and an appearance that made her readily acceptable for office work.

Norma was referred to a bank interested in interviewing high school seniors, but failed to land the job because of her poor school attendance record.

INABILITY TO GET ALONG WITH OTHERS

JOHN H., 18, had just graduated from a vocational high school in the top third of his class. He majored in machine shop and wanted a beginning job in that field. He appeared to be quiet, serious and pleasant. The counselor called an employer who wanted a boy in his machine shop. This employer wanted a vocational high school graduate with at least one year of paid machine shop experience. But the counselor asked him to interview John. Because of his rank in school, and the counselor's description of him, the employer did. John was interviewed by the personnel manager and the shop foreman; impressed by his intelligence and personality, they thought he would fit in very nicely. So they hired him.

A month later, however, the personnel manager called the Employment Office to say John had been discharged. The chief reason was his inability to work with others. It seemed he completely lacked a sense of humor and judgment in dealing with people. John had been unable to get along with the staff and his supervisor. He questioned management decisions, although he was very poorly informed. Whenever a fellow worker made a remark about anything from the weather to a shop problem, John would solemnly ask on what authority the statement was made; other workers refused to eat lunch with him; his supervisor avoided him as much as possible. The employer said that while John was undoubtedly a bright boy, his inability to get along with other people had created too many problems for the firm. So John lost his job.

UNSUITABILITY FOR JOB

[redacted]ORIE N., 18, small, slight, neat--but with a chip-on-the-shoulder attitude--would only consider work as a clerk-typist. Her sister worked in an office; she would too.

But Marjorie had majored in homemaking, had only two semesters of typing back in her sophomore year.

She came to the Employment Service after graduation. Employment Service tests found her typing skill to be negligible, her general academic ability very low. On the credit side, however, tests showed she could easily learn to operate a sewing machine, do certain assembly jobs, etc.

All efforts to help her recognize her assets failed. Marjorie struck out on her own to get a clerical job. During the past year and a half, she worked fitfully on a few temporary service jobs. Her office job? She is still looking.

MARY, 18, a graduate of a high school business course which included two years of typing, was below average in her clerical subjects, slow and inaccurate in typing. But she so wanted to become an office worker that she went to school for another year of training. She completed her course but failed to qualify for graduation.

Very courteous, always well-groomed and eager to please, she was advised by her instructor to get a routine office job in which she would be carefully supervised.

Mary was placed on such a clerical job under a very considerate and patient supervisor. Two weeks of simple filing, posting, and typing, showed that she was very slow, inac[redacted]ate, and could not do a satisfactory job. She was laid off.

Although Mary realized that she is unable to do clerical work well, she is still unwilling to consider any other field.

APPLYING FOR JOB WITH FRIEND OR RELATIVE

PAUL B., 18, left school in the 9th grade at age 17, and worked for about a year on unskilled jobs, each lasting a few days to a few weeks. He repeatedly reported to the Employment Service with several of his friends, although the counselor pointed out the drawbacks of doing so. When he finally agreed to apply for work alone he was referred to a department store as a delivery truck helper.

The employer reported that three boys came with Paul, causing much confusion in the waiting room. He did not hire Paul, feeling that such conduct showed he was too immature.

HELEN K., 17 years old, a high school business-course graduate appeared at the Employment Service with two friends--all 3 looking for jobs as file clerks. Helen had a knowledge of typing, her appearance was excellent, her personality engaging. She was referred to a large local insurance company, was interviewed, and reported back that she was not hired, but had filed an application and was told she would be notified if "anything turned up". She was quite indignant that she had been referred to a firm where there really was no job. The interviewer called the employer who reported that Helen brought her two friends with her. He could hire only one, and felt that since all three walked [redacted] together, they wanted to work together. If he hired Helen, he felt she would stay only until jobs could be found elsewhere so that all three could be together.

IGNORANCE OF LABOR MARKET FACTS

RICHARD R., 17, had one year of high school and very little shop training. After leaving school he did repair work in a plant paying him well above the average for boys under 18. He liked the work, stayed on the job several months, received a raise and felt the job had a future. However, reports of higher wages paid elsewhere led him to quit.

When he came to the employment office he had already spent several weeks looking for a better paying job. He was upset because his family needed his help. He seemed sincere in his desire to work where he could be trained for advancement and finally decided to take a trainee job at less pay than his previous job.

If Richard had looked into the wage and job situation for 17-year-olds before leaving his first job, he would probably have decided to stay on the job he had, and would have saved himself time, money and effort.

GEORGE H., an 18-year-old high school graduate, applied to the Employment Service for an office job. He was placed as a clerk. About three months later, he quit to go South and make some of that "big money" he heard was there.

Florida had sunshine, but little else to offer him. In desperation, George took a job as lobby porter in a hotel just to earn money enough to get back home.

At the Employment Service once again, he was greatly disturbed because he now had bills to meet but no money. He was sorry he had left his first job and admitted it was a mistake not getting reliable labor market information about the South before quitting.

HELEN T., an attractive 17-year-old, came to the Employment Service four months after graduation. She wanted a job only as a receptionist and only with an advertising agency. Although her knowledge of the advertising business was limited she said she had been told it was an "exciting" business and one in which she could expect high wages. She had taken 2 years of typing in school but didn't like it and preferred not to use it. The counselor explained the usual requirements for receptionist jobs, the prevailing wages and told her she was excluding herself from many opportunities if she persisted in working only for an advertising firm. However, H. T. remained firm in her decision. She returned to the Employment Service 3 months later, saying she had been unsuccessful in finding work. She decided to seek work with other types of firms and use her typing to a limited degree.

SENSITIVITY ABOUT A PHYSICAL DEFECT

HARRY L., 21, neatly dressed and pleasant, seemed to have clerical and public contact qualifications. He suffers from a skin ailment that causes brownish blotches on his face and neck. While not too disfiguring or repulsive, it is very disturbing to him. When he came to the office he kept his hat on to keep his disfigurement from being too apparent.

Harry had worked at various part-time selling and office jobs for short periods but had no steady work since graduating from high school. He felt ill at ease when interviewed by employers.

The interviewer discussed the probability that others were less aware of his skin ailment than he was, that he should acquire the ability to explain it casually, and remove his hat during interviews.

When he was referred to a beginning office job, the interviewer discussed Harry's condition and awareness of it with the employer. He was hired and is trying to overcome his self-consciousness.

NO SENSE OF RESPONSIBILITY

DONALD T., 18, is serious, cooperative, and neat. His father owns a garage and Donald got experience working part time and summers until he completed 8th grade. Then he left school and worked for a year as a mechanic's helper. He quit because of long hours and low pay.

On the basis of an excellent reference from this employer, the applicant was accepted by another garage at a very good salary. The new employer soon called to say that the applicant was exactly what he wanted. Customers liked him so well he was getting tips above his attractive salary. He worked three months and was suddenly discharged.

The young man, left alone one day, had crashed a motorcycle into the garage wall, damaging the motorcycle and badly injuring his hand. He said he was gassing the motorcycle for a nearby gas station, and since the motor was running he wanted to "kill an urge" to try out a motorcycle.

The employer now felt that Donald could not be trusted alone. To quote the employer: "I, too, get the urge to take out one of these gorgeous Cadillacs that come in here, but I don't." He felt Donald might not resist other such temptations, and dismissed him.

FRANCES K., 20, came into the employment office wanting to do public contact work. So outstanding were her appearance and personality that an opening for her was solicited with one of the leading airlines. She was sent to Washington for an interview and hired immediately. The minimum age limit of 21 was waived. She completed the air hostess training and started on a regular flight.

After six months, however, she reappeared in the Employment Office. An airline executive revealed the reason. "Air travel is like the mail," he said. "A scheduled flight must always go through (weather conditions permitting). Hostesses and pilots must always be ready; only the most serious illness prevents them from carrying out their assigned tasks. This young lady, because of a very minor illness, refused to take her scheduled flight, so we decided we could dispense with her services."

Regardless of her outstanding qualities, Frances not only lost this job but she will be seriously handicapped in future applications for employment, because the airline will never give her a satisfactory reference.

MISREPRESENTATION

TERRY H., 16, left school after completing the 10th grade. To get a job, she misrepresented her age as 18 and obtained work with a clothing company. After two months the employer learned the truth and very quickly let her go. These facts were revealed during her first interview after being discharged.

Terry's employer would have been liable if she were injured on this job, since she had no work permit. Through this misrepresentation, Terry hurt her chances for obtaining future jobs from other employers in this small community.

INSISTENCE ON OWN CONCEPT OF JOB

FREDDIE F., 20 years old, was looking for a clerical job with a chance for advancement. A student at evening college, he had completed a year's study of business administration. His appearance was satisfactory and he seemed to have no trouble getting clerical jobs.

When the Employment Service referred him to a permanent clerical job, he was hired, but laid off in a short time. Freddie said it was due to lack of work. The employer had another story: Freddie did his work well, but was a constant source of annoyance to his co-workers and supervisors. Freddie complained that the office was poorly managed, tried to put in his own methods, and even criticized the employer's own performance.

DAVE, 17 years old, a high school graduate, was referred to an office boys job in a well-known company with a good promotion policy. When hired, he was told what his duties would be and when he could expect his first wage increase.

One of his duties was inserting catalogs in envelopes, stacking them, and preparing them for the post office.

After one month, he asked for a promotion. The interviewer in the firm's personnel office said that Dave found his job dull, particularly the inserting of the catalogs into the envelopes. The personnel interviewer pointed out how this job could lead to others, specifically in the sales and accounting departments, and discussed with him the idea of further training. She even arranged an interview with the sales manager.

After two months, Dave resigned and wrote the personnel interviewer the following letter:

Dear Miss _____

May I please take this opportunity to inform you that December 30, 1961 will be my last day of work with the _____ Company. I feel that the pay is not adequate for the amount of work expected of me. And, I am inclined to think the position does not fall in the realm of office boy's chores.

My stay with the company has been enjoyable, and the employees have been cooperative and gracious to me. I feel it would have been entirely unnecessary for me to leave had the company adhered to my principles of an office boy's duties.

Yours very truly,

APPENDIX G

WHAT DO I LIKE?

DIRECTIONS: Read each statement. Place a check in the yes circle after each statement if it tells something you like to do. Place a check in the no circle if it is something you do not like to do.

CLUSTER NUMBER

		YES	NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	I prefer to work outdoors	○	○	○	○		○						○				○	
2.	I enjoy working with animals	○	○	○														
3.	I like to travel	○	○	○										○				○
4.	I enjoy working with numbers	○	○							○	○		○	○	○			
5.	I enjoy working with other people	○	○					○			○			○	○	○	○	
6.	I like to organize and plan ahead	○	○		○	○					○		○	○	○			
7.	I like art and art classes	○	○			○			○									
8.	I like to do original writing	○	○			○			○									
9.	I enjoy working with tools	○	○				○					○						○
10.	I like to do science experiments	○	○	○	○			○		○			○			○		
11.	I prefer working alone	○	○		○				○				○					○
12.	I like to work with machines	○	○	○	○		○					○						
13.	I like to help other people	○	○					○		○	○					○	○	○
14.	I enjoy taking care of children	○	○					○								○		
15.	I like to repair things	○	○				○					○					○	○
16.	I like to play a musical instrument or sing	○	○						○									
17.	I like to build things	○	○				○					○						
18.	I like to read	○	○			○			○	○								
19.	I prefer to work indoors	○	○			○		○		○		○			○	○		
20.	I enjoy talking to people	○	○								○			○	○	○	○	
	TOTALS																	

After you have marked all of the yes and no statements, put a check in the circles under the number wherever you have a yes. For example:

If you marked yes to the first statement -- "I prefer to work outdoors", then place a check in the circles under the numbers 1,2,4,10, and 14. Do not make any marks where you have a no.

After you have marked all of the yes responses, add up the checks under each number and place the totals at the bottom of each line. Now you are ready to look at some job clusters. If the largest number of checks is under the 1 column, take the sorting needle, insert it through hole 1 and shake out the cards in this cluster. These jobs should match your likes and preferences as you marked them.

If you have more than one numbered column with the same high score, start with the one to the left and explore some of the jobs in each of the clusters. If you have questions, ask your teacher or counselor.

WHAT JOB IS FOR YOU??

These questions are to help you find jobs which have requirements that are similiar to your interests and abilities. Read the questions or statements in large print then circle the number after the response that best fits you, your abilities, your interests, or your plans. After you have done this, there are further instructions.

HOW MUCH EDUCATION DO YOU PLAN TO COMPLETE BEFORE LOOKING FOR A FULL-TIME JOB?

(Select only one answer)

A.	I will not finish high school.	16
B.	I will finish high school or complete by C.E.D.	17
C.	I would be willing to take as much as two years special training after high school.	NS*
D.	I want to enter an occupation through apprenticeship training.	18

*No job in the IOWAscript deck requires more than two years of special training.

A PERSON CAN USUALLY DO A THING BEST IF THEY LIKE TO DO IT. SELECT FROM THE ITEMS THOSE THINGS YOU WOULD LIKE BEST ABOUT A JOB.

(Select as many answers as you wish)

I would prefer work that is mostly:

A.	Outside	31
B.	Inside	32
C.	Inside at a desk	33
D.	Selling things or convincing people to my way of thinking	34
E.	Alone or not involving people	35
F.	Using machines or equipment	36
G.	Helping, advising, or assisting other people	37
H.	Using facts and information to solve problems or develop ideas and products. (This could include jobs in business, repair work, or some types of selling)	38
I.	Organizing and using information. (This would be gathering information and putting it together in jobs like building trades, laboratory work, and some office jobs)	39
J.	Copy, sorting, and putting things together (This could involve typing, copying, or following step-by-step plans to make things)	40
K.	Precision work (Jobs in mechanics, metal work, office machine repair, drafting, laboratory work, sewing, and some building trades)	41

EARNINGS ARE AN IMPORTANT PART OF ANY JOB. HOW MUCH MUST YOU MAKE (for full-time work) BEFORE YOU COULD CONSIDER STARTING TO WORK AT A PARTICULAR JOB?

See special sorting instructions

A.	At least the minimum wage	42
B.	At least $350-$499 per month ($2.00-$2.87/hr.)	43
C.	At least $500-$699 per month ($2.88-$4.02/hr.)	44
D.	At least $700-$999 per month ($4.03-$5.75/hr.)	45
E.	At least $1,000 per month ($5.67/hr.)	46
F.	Not important at this time	NS

Now that you have answered the questions, you can use the information to select some jobs to explore. Place the IOWAscript deck of cards in the plastic box so you can see the number 1-23 in the upper right hand part of the card. Take the sorter and run it through the hole numbered the same as the first answer you have circled. (If you circled NS, this means "NO SORT" so just go on down your answers to the first number circled).

After you have made a sort, use only the cards that drop out of the deck. Lay those that remain on your sorter aside. Now using those that dropped out of the deck, continue sorting according to the numbers you have circled.

REMEMBER--USE ONLY THOSE CARDS THAT DROP OUT OF THE DECK FOR EACH SORT

For the numbers 24-46 you will need to turn the cards over in the box to sort.

**Special Sorting Instructions

When sorting under the earnings section, you will need to sort the number you circle and then each higher number. For example, if you select number 42 you will also sort out from holes 43, 44, 45, and 46. If you circle 45 you will sort this hole and also 46 to find the jobs that pay the salary you desire and higher.

If the characteristic you select is marked NS, this means there is no sort that can be made for this characteristic.

After you have completed the sorting, read these on the microfilm reader. If you wish further information, see your counselor. If you have no cards left when you are through sorting, talk to your counselor about how you have answered the questions.

List the job titles that are sorted out so you can go back to these later if you do not have time to read them all now.

1._____ 3._____ 5._____

2._____ 4._____ 6._____

You may want to see what jobs certain courses in high school will help prepare you to enter. From the list below you can see what jobs are related to specific courses or combination of courses.

English	20
Mathematics	21
Science	22
Social Studies	23
Distibutive Education	24
Office Skills	25
Homemaking	26
Shop Classes (Trade & Industry)	27
Vocational Agriculture	28
Health and Physical Education	29
Art or Music	30

If you are using this information to plan your course of study be sure to talk about your plans to a teacher or counselor.

APPENDIX H

IOWAscript INTERVIEW FORM 2A

JOB TITLE:_____ DATE:_____

D.O.T.#_____

NAME OF EMPLOYER OR WORKER:_____

ADDRESS:_____ TELEPHONE:_____

1. What does a beginning worker do? _____

_____

_____

2. What does an experienced worker do that is different?_____

_____

_____

3. Physical requirements for the job:_____

_____

_____

4. Do new employees have to take a physical examination before becoming a full-time employee? Yes_____ No_____ If yes, is this a governmental requirement?

Yes_____ No_____

5. Personal requirements for the job:_____

_____

6. Do employees take a written test? Yes_____ No_____

7. Are there minimum or maximum age limits? Yes_____ No_____ If yes, what are they? _____

_____

8. Education required or preferred:
   A. High School not needed _____
   B. High School preferred _____
   C. High School required _____
   D. Vocational or trade school preferred _____
   E. Vocational or trade school required _____

9. Will a G.E.D. (High School Equivalency Test) be accepted instead of a high school diploma? Yes_____ No_____

10. Does an employee need a license? Yes_____ No_____

11. Is there an apprenticeship program for this job? Yes_____ No_____

12. Will a new employee be trained on-the-job? Yes_____ No_____

13. How long does it take to train a new worker? Less than 1 month_____ 1-3 months ___
6-12 months_____ 1-2 years_____ over 2 years_____

14. Are job opportunities increasing_____or decreasing_____or holding about the same_____

15. Is the supply of job applicants too great _____or not enough_____or about right_____

16. In the next five years do you expect job opportunities to increase_____or decrease___
or stay about the same_____

17. Do you employ any part-time help? Yes_____ No_____

18. Do you employ high school students? Yes_____ No_____

19. Is this job full-time_____ or seasonal_____?

20. How many hours a week is normal? 29 or less_____ 30-35_____36-40_____
41-48_____ 49 or more_____

21. What are normal work hours _____ to _____. If shift work, what are the shifts?
_____ to _____, _____ to _____, and _____ to _____

22. Is overtime work common_____ unusual _____ or never available _____?

23. Starting salary $_____per hr. or $_____per week or $_____per mo.

24. Usual salary for trained worker $_____per hr. or $_____per week or
$_____per month.

25. Maximum salary for this job $____per hr. or $_____per week or $_____per mo

26. Advancement opportunities: to what job(s)_____
to what wages _____
How does a worker advance?_____

27. What fringe benefits?

Accident & Hospital Insurance	_____
Unemployment Insurance	_____
Life Insurance	_____
Profit Sharing	_____
Vacation (how much?)	_____
Holidays (how many?)	_____
Pension Plans	_____
Other benefits (meals, housing, car furnished, discount buying)	_____

_____

28. Is this job considered:

Physically hard	Yes_____	No_____
"Dirty work"	Yes_____	No_____
"Desk work"	Yes_____	No_____
"Hazardess work"	Yes_____	No_____

29. Do many other employers in this area need this type of worker? Yes_____ No_____

30. Does worker provide his own tools or equipment? Yes_____ No_____
If yes, what is the approximate cost $_____.

31. Any special advantages of this job?_____

_____

32. Any special disadvantages of this job?_____

_____

33. Are most workers union members? Yes_____ No_____
If yes, what union?_____

34. Special comments:_____

_____

_____

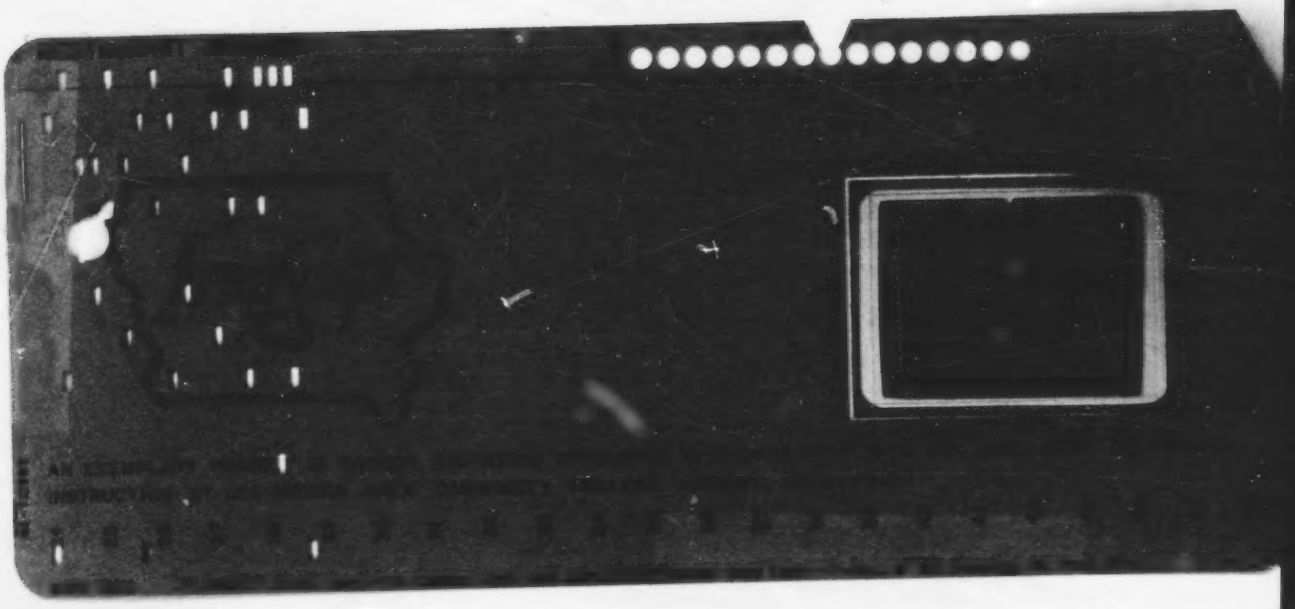
_____

_____

Name of student:_____

School:_____

Cg



APPENDIX I

IOWAscript ELEMENTARY OCCUPATIONAL DECK

The elementary deck is organized around the 15 occupational clusters shown on the attached sheet. Five representative occupations have been selected from each cluster based on the educational requirements for entry.

Each cluster is represented by:

Two occupations requiring high school completion or less.

Two occupations that require post-secondary training, but less than a B.A. degree.

One occupation requiring a B.A. degree or more.

The material is designed to show the wide range of jobs within each cluster, and the broad requirements for the various jobs. No effort is intended to develop specific occupational choice; rather develop an understanding of the wide choices available and some of the factors that go into making a choice. Your ideas on use of these materials will be appreciated.

EB/cg

INDEX

ELEMENTARY CAREER AWARENESS DECK

(1) AGRI-BUSINESS & NATURAL RESOURCES
Farm Assistant
Farm Equipment Mechanic
Grain Buyer
Soil Conservation Aide
Veterinarian

(2) ENVIRONMENT
Environmental Health Assistant
Forest Ranger
Groundskeeper
Waste Water Treatment Plant Operator
Wildlife & Conservation Technician

(3) COMMUNICATIONS & MEDIA
Electrical Engineer
Library Assistant
Radio & T.V. Announcer
Telegrapher
Telephone Operator

(4) CONSTRUCTION
Air Hammer Operator
Architect
Architectural Draftsman
Carpenter
Glazier

(5) CONSUMER & HOMEMAKING OCCUPATIONS
Floor Covering Installer
Home Economist
Interior Decorator
Shoe Repairman
Television & Radio Repairman

(6) FINE ARTS & HUMANITIES
Anthropologist
Commercial Artist
Dancer
Musician
Stagehand

(7) HEALTH OCCUPATIONS
Dental Assistant
Dentist
Optical Technician
Orderly
Registered Nurse

(8) HOSPITALITY & RECREATION
Busboy
Camp Counselor
Cook & Chef
Dietitian
Restaurant Manager

(9) MANUFACTURING
Assembler
Mechanical Engineer
Millwright
Stationary Engineer
Tool & Die Maker

(10) MARINE SCIENCE
Fish Hatchery Manager
Fisherman (Commercial)
Oceanographer
Oceanographic Technician
Seaman

(11) MARKETING & DISTRIBUTION
Buyer
Claim Adjuster
Florist
Marketing Analyst
Stock Clerk

(12) OFFICE OCCUPATIONS
Certified Public Accountant
Mail Clerk
Office Machine Serviceworker
Receptionist
Secretary

(13) PERSONAL SERVICE
Beauty Operator
Cleaner & Presser
Marriage Counselor
Mortician
Travel Agent

(14) PUBLIC SERVICE
Janitor
Lawyer
Policeman
Post Office Clerk
Teacher Aide

(15) TRANSPORTATION
Aerospace Engineer
Airline Stewardess/Steward
Auto Parts Specialist
Diesel Mechanic
Service Station Attendant

**Please note that the number in parenthesis is the cluster number.